

=> fil reg

FILE 'REGISTRY' ENTERED AT 15:36:33 ON 15 SEP 2006

=> d his

FILE 'HCAPLUS' ENTERED AT 14:05:55 ON 15 SEP 2006

E JP2002-359224/PRN,AP,PN

L1 1 S E3  
SEL RN

FILE 'REGISTRY' ENTERED AT 14:06:39 ON 15 SEP 2006

L2 11 S E1-E11  
L3 STR  
L4 0 S L3  
L5 STR L3  
L6 0 S L5  
L7 STR L5  
L8 0 S L7  
L9 SCR 1098  
L10 0 S L7 AND L9  
L11 STR L7  
L12 1 S L11 AND L9  
L13 1 S 78435-18-4/RN  
L14 1 S 709031-65-2/RN

FILE 'HCAPLUS' ENTERED AT 14:23:17 ON 15 SEP 2006

L15 1 S L14

FILE 'REGISTRY' ENTERED AT 14:24:01 ON 15 SEP 2006

L16 STR  
L17 STR  
L18 38 S L16 AND L17 AND L9  
L19 STR  
L20 15 S (L16 AND L17) NOT L19 AND L9  
L21 SCR 1918  
L22 STR L19  
L23 6 S (L16 AND L17) NOT L22 AND L9 NOT L21  
L24 1 S L11  
L25 STR  
L26 6 S L25 AND L17 AND L9  
L27 2324 S L25 AND L17 AND L9 FUL  
L28 4 S L27 AND L2  
SAV L27 NWA060/A  
L29 1 S L11 SAM SUB=L27  
L30 14 S L11 FUL SUB=L27  
L31 4 S L30 AND L2  
SAV L30 NWA060A/A

FILE 'HCAPLUS' ENTERED AT 15:29:24 ON 15 SEP 2006

L32 6 S L30

FILE 'MARPAT' ENTERED AT 15:29:38 ON 15 SEP 2006

L33 4 S L30  
L34 212 S L30 FUL

FILE 'REGISTRY' ENTERED AT 15:32:26 ON 15 SEP 2006

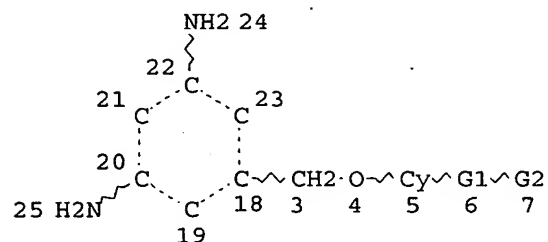
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L36 46 S L3 FUL SUB=L27  
L37 38 S L36 NOT L30

L38                      8 S L37

L11 STR

Ak @17

@16 14 15



DEFAULT ECLEVEL IS LIMITED

NUMBER OF NODES IS 22

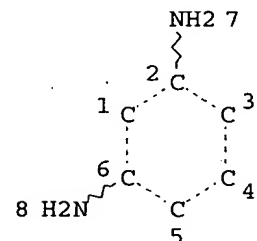
L17 STR

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1	2	3

DEFAULT ECLEVEL IS LIMITED

NUMBER OF NODES IS 3

L25 STR



NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE  
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 L30 14 SEA FILE=REGISTRY SUB=L27 SSS FUL L11  
 L32 6 SEA FILE=HCAPLUS ABB=ON L30

=> fil hcap  
 FILE 'HCAPLUS' ENTERED AT 15:36:53 ON 15 SEP 2006

=> d l32 1-6 ibib abs hitstr hitind

L32 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2006:48551 HCAPLUS  
 DOCUMENT NUMBER: 144:139035  
 TITLE: Optically active phenylenediamines, and their  
 polyimides or polyimide precursors  
 INVENTOR(S): Sahade, Daniel Antonio; Oda, Takuo  
 PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006016303	A2	20060119	JP 2004-187213	2004 0625
PRIORITY APPLN. INFO.:			JP 2004-164336	A 2004 0602

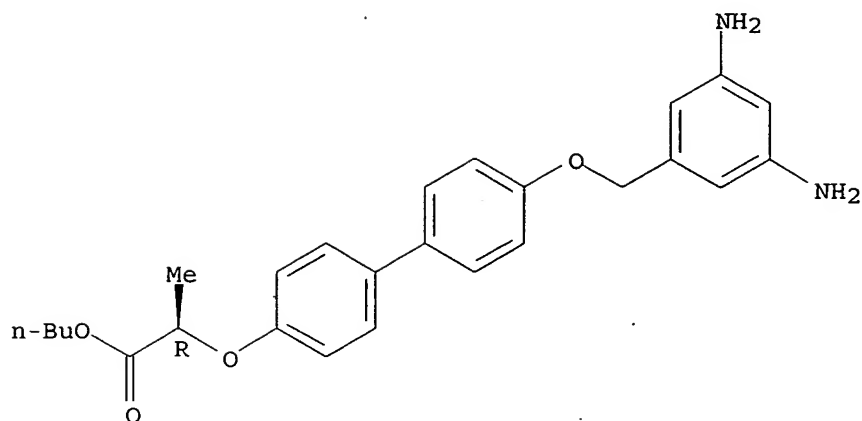
AB The phenylenediamines are PX1X2OG or PX1(CH2)nOX2OG [P =  
 diaminophenyl; X1 = O, CH2O, CO2; X2 = phenylene, diphenylene; G =  
 (R)- or (S)-X3C\*HX6X4X5; \* = chiral point; X3 = single bond, CH2;  
 x4 = CH2, CO2; X5 = C1-10 alkyl; X6 = CF3, Me; n = 1-10]. The  
 polyimides or polyimide precursors bearing optically active groups  
 on side chains are useful for liquid crystal alignment films for  
 displays.

IT 873691-16-8P  
 (optically active phenylenediamines for polyimides or polyimide  
 precursors for liquid crystal alignment films)

RN 873691-16-8 HCAPLUS

CN Propanoic acid, 2-[[[4'-[(3,5-diaminophenyl)methoxy][1,1'-biphenyl]-  
 4-yl]oxy]-, butyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 873691-26-0P

(optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)

RN 873691-26-0 HCAPLUS

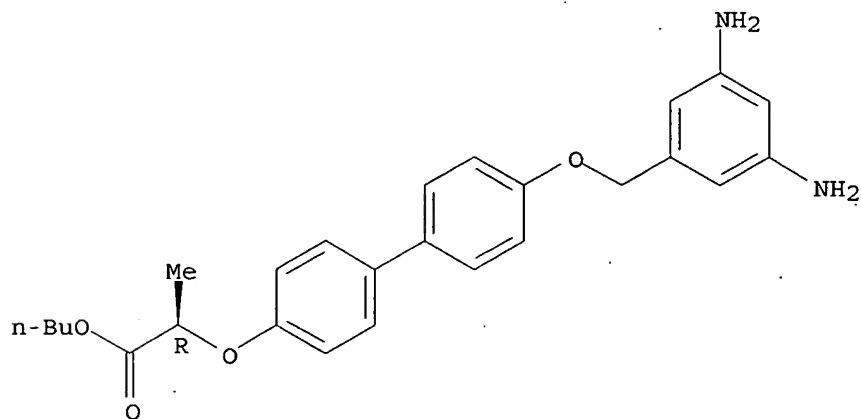
CN Propanoic acid, 2-[[4'-[(3,5-diaminophenyl)methoxy][1,1'-biphenyl]-4-yl]oxy]-, butyl ester, (2R)-, polymer with tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

CM 1

CRN 873691-16-8

CMF C26 H30 N2 O4

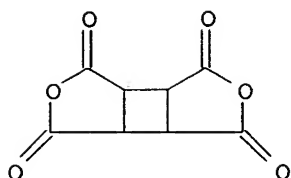
Absolute stereochemistry.



CM 2

CRN 4415-87-6

CMF C8 H4 O6



CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 25, 35, 38  
 IT 34451-19-9P 122164-06-1P 873303-97-0P 873691-14-6P  
 873691-15-7P 873691-16-8P 873691-17-9P 873691-18-0P  
 873691-19-1P 873691-20-4P 873691-21-5P 873691-22-6P  
 873691-23-7P 873691-24-8P  
 (optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)  
 IT 873303-98-1P 873691-25-9P 873691-26-0P 873691-27-1P  
 873691-28-2P 873691-29-3P 873691-30-6P 873691-31-7P  
 873691-32-8P  
 (optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)

L32 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:996247 HCAPLUS  
 DOCUMENT NUMBER: 141:429761  
 TITLE: Alignment agent for liquid crystal  
 INVENTOR(S): Taki, Hirotsugu; Saito, Tetsuya  
 PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan  
 SOURCE: PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004099289	A1	20041118	WO 2004-JP6275	2004 0430

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CN 1784452 A 20060607 CN 2004-80012064

2004  
0430

PRIORITY APPLN. INFO.: JP 2003-129091 A 2003

0507

AB An alignment agent for a liquid crystal which contains one or more polymers for forming an alignment film for a liquid crystal, characterized in that at least one of the polymers is a polymer which has an alkylene group having 4 to 16 carbon atoms in the main chain thereof and has a side chain having a function to enhance the pretilt angle of the liquid crystal. The alignment agent for a liquid crystal can provide an alignment film which allows the achievement of a high and thermally stable crystal orientation and pretilt angle without the reliance on a process, such as rubbing and cleaning by an organic solvent.

IT 796853-43-5P

(polyimide alignment agent for liquid crystal display element)

RN 796853-43-5 HCAPLUS

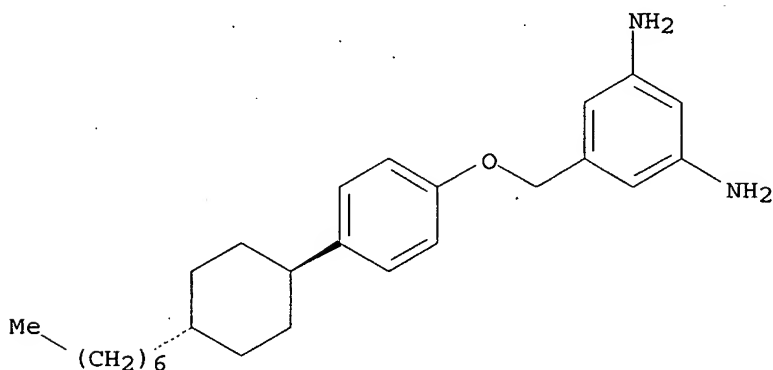
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 5-[[4-(trans-4-heptylcyclohexyl)phenoxy]methyl]-1,3-benzenediamine and 4,4'-[1,5-pentanediy]bis(oxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 796853-39-9

CMF C26 H38 N2 O

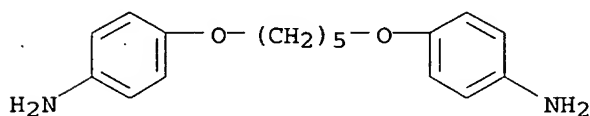
Relative stereochemistry.



CM 2

CRN 2391-56-2

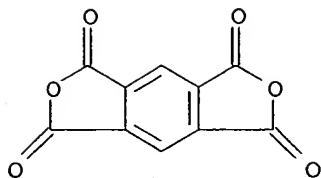
CMF C17 H22 N2 O2



CM 3

CRN 89-32-7

CMF C10 H2 O6



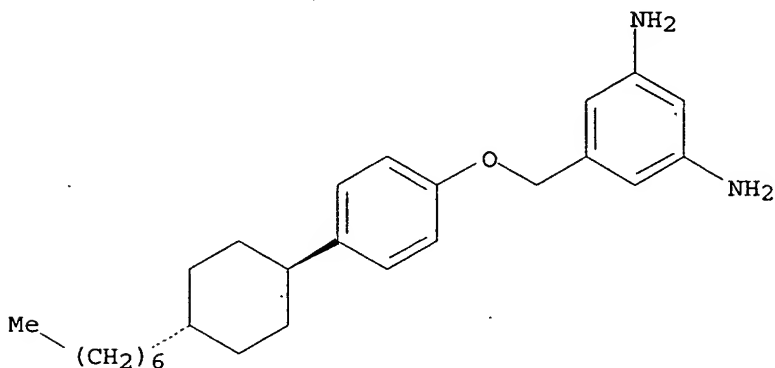
IT 796853-39-9P

(polyimide alignment agent for liquid crystal display element)

RN 796853-39-9 HCAPLUS

CN 1,3-Benzenediamine, 5-[[4-(trans-4-heptylcyclohexyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C08G073-10

ICS C08L079-08; G02F001-1337

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 25, 35, 38

IT 182315-97-5P, 4,4'-Diaminodiphenylmethane-1,2,3,4-cyclobutanetetracarboxylic dianhydride-pyromellitic dianhydride copolymer 796853-37-7P 796853-40-2P 796853-41-3P 796853-42-4P 796853-43-5P

(polyimide alignment agent for liquid crystal display element)

IT 796853-38-8P 796853-39-9P

(polyimide alignment agent for liquid crystal display element)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:515568 HCAPLUS

DOCUMENT NUMBER: 141:54799

TITLE: Novel diaminobenzene derivative, polyimide precursor and polyimide obtained therefrom, and aligning agent for liquid crystal

INVENTOR(S): Hosaka, Kazuyoshi; Taki, Hirotsugu; Nawata, Hideyuki

PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052962	A1	20040624	WO 2003-JP15800	2003 1210

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

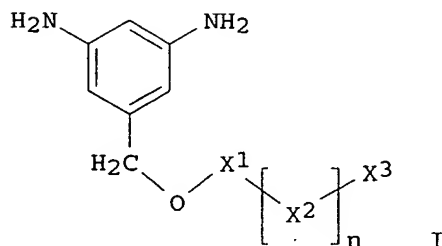
AU 2003289305	A1	20040630	AU 2003-289305	2003 1210
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CN 1720280	A	20060111	CN 2003-80105205	2003 1210
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PRIORITY APPLN. INFO.: JP 2002-359224 A 2002  
1211

WO 2003-JP15800 W 2003  
1210

OTHER SOURCE(S): MARPAT 141:54799  
 GI



AB The present invention relates to (i) a novel diamine useful especially as a material for a resin for liquid-crystal alignment films, (ii) a polyimide precursor or polyimide synthesized from the diamine, and (iii) an aligning agent for liquid crystals which comprises the polymer. The aligning agent gives a liquid-crystal alignment film

which has a high pretilt angle for liquid crystals, has excellent thermal stability of the pretilt angle, and is reduced in the dependence of the pretilt angle on rubbing pressure. The diamine is a diaminobenzene derivative I, wherein X1, X2 = a cyclic group and X3 = a member selected from alkyl, alkoxy, fluoroalkyl, fluoroalkoxy, fluorine, chlorine, bromine, and cyano. The polyimide precursor or polyimide is synthesized using the diaminobenzene derivative as part of the starting materials. The aligning agent for liquid crystals comprises at least one of these polymers. Thus, 100.00 g biphenol and 103.90 g 1-bromooctane were reacted at 110° for 10 h, reacted with 3,5-dinitrobenzyl chloride, and reduced to give a diamine with m.p. 192-196°, 1.64 g of which was polymerized with 2.25 g 1,4-diaminobenzene and 7.81 g 3,4-dicarboxy-1,2,3,4-tetrahydro-1-naphthalene succinic dianhydride to give 20%-solids polyimide precursor with viscosity 3481 mPa-s and weight average mol. weight 134,600, the resulting precursor solution was diluted with NMP and Bu cellosolve, applied on an ITO-coated glass substrate, heated at 80° for 5 min and 220° for 1 h, rubbed with a rayon cloth, and fabricated into a liquid crystal cell, showing free tilt angle 6.8° initially, 6.9° after treatment at 120° for 5 min, and 6.9° after treatment at 120° for 1 h.

IT 709031-69-6P 709031-71-0P

(liquid crystal; preparation of diaminobenzene derivs. for polyimide precursors useful as aligning agents for liquid crystals)

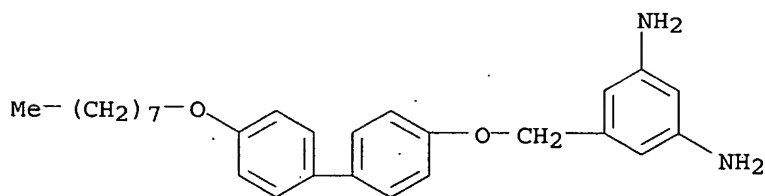
RN 709031-69-6 HCAPLUS

CN Naphtho[1,2-c]furan-1,3-dione, 3a,4,5,9b-tetrahydro-5-(tetrahydro-2,5-dioxo-3-furanyl)-, polymer with 1,4-benzenediamine and 5-[[[4'-(octyloxy)[1,1'-biphenyl]-4-yl]oxy]methyl]-1,3-benzenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 709031-65-2

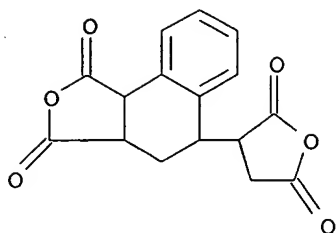
CMF C27 H34 N2 O2



CM 2

CRN 13912-65-7

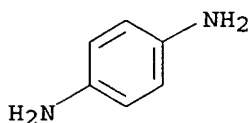
CMF C16 H12 O6



CM 3

CRN 106-50-3

CMF C6 H8 N2



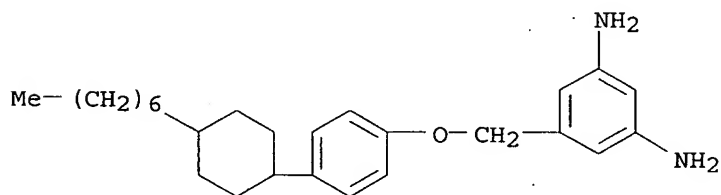
RN 709031-71-0 HCAPLUS

CN Naphtho[1,2-c]furan-1,3-dione, 3a,4,5,9b-tetrahydro-5-(tetrahydro-2,5-dioxo-3-furanyl)-, polymer with 1,4-benzenediamine and 5-[[4-(4-heptylcyclohexyl)phenoxy]methyl]-1,3-benzenediamine (9CI)  
(CA INDEX NAME)

CM 1

CRN 709031-68-5

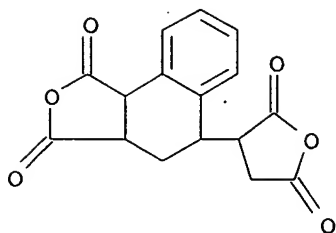
CMF C26 H38 N2 O



CM 2

CRN 13912-65-7

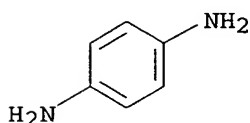
CMF C16 H12 O6



CM 3

CRN 106-50-3

CMF C6 H8 N2

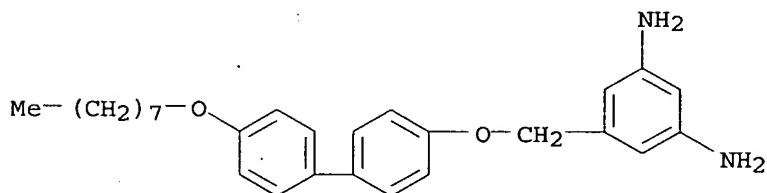


IT 709031-65-2P 709031-68-5P

(monomer; preparation of diaminobenzene derivs. for polyimide precursors useful as aligning agents for liquid crystals)

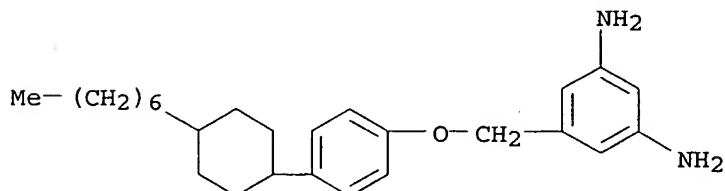
RN 709031-65-2 HCAPLUS

CN 1,3-Benzenediamine, 5-[[[4'-(octyloxy)[1,1'-biphenyl]-4-yl]oxy]methyl]- (9CI) (CA INDEX NAME)



RN 709031-68-5 HCAPLUS

CN 1,3-Benzenediamine, 5-[[[4-(4-heptylcyclohexyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



IC ICM C08G073-10

ICS C07C217-76; G02F001-1337

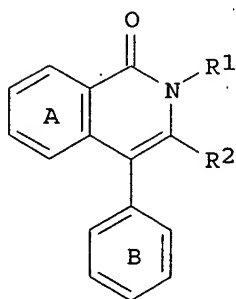
CC 35-2 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 25, 38, 74, 75

IT 709031-69-6P 709031-71-0P  
 (liquid crystal; preparation of diaminobenzene derivs. for polyimide precursors useful as aligning agents for liquid crystals)  
 IT 709031-65-2P 709031-68-5P  
 (monomer; preparation of diaminobenzene derivs. for polyimide precursors useful as aligning agents for liquid crystals)

L32 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:902258 HCAPLUS  
 DOCUMENT NUMBER: 137:379992  
 TITLE: Method of inhibiting neoplastic cells with isoquinolinonecarboxylates  
 INVENTOR(S): Pamukcu, Rifat; Piazza, Gary A.  
 PATENT ASSIGNEE(S): Cell Pathways, Inc., USA  
 SOURCE: U.S., 119 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6486155	B1	20021126	US 1998-198413	1998 1124
PRIORITY APPLN. INFO.:				1998 1124

OTHER SOURCE(S): MARPAT 137:379992  
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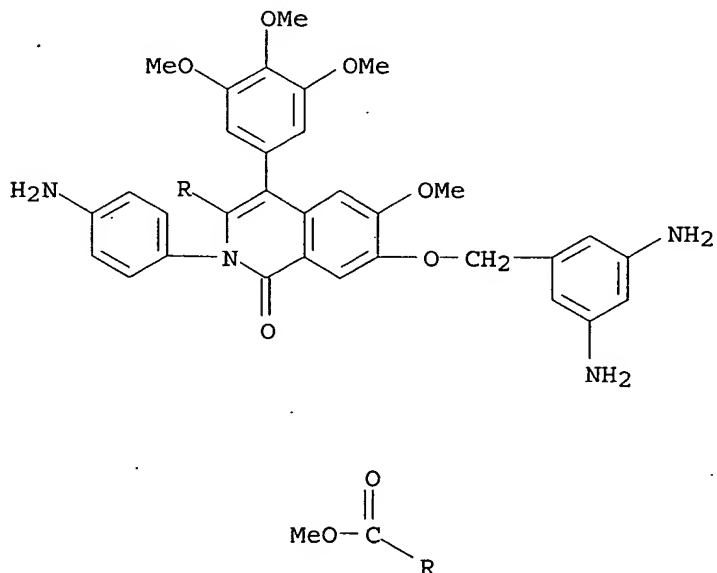


AB A method is claimed for inhibiting neoplasia (no data), particularly cancerous and precancerous lesions, by exposing the affected cells to 1-isoquinoline-3-carboxylates. Such compds. are effective in modulating apoptosis and eliminating and inhibiting the growth of neoplasias such as precancerous lesions, but are not characterized by the severe side reactions of conventional non-steroidal antiinflammatory drugs or other chemotherapeutics. Although the methods of preparation are not claimed, example preps. of 429 isoquinolines and 107 intermediates are included; these examples are referenced to PCT application WO 98/38168. Although the claims indicate I (ring A and ring B are the same or different

and each a (un)substituted benzene ring, R1 is morpholine, R2 is -COOR3, and R3 is alkyl; e.g. 7-benzyloxy-6-methoxy-3-methoxycarbonyl-2-morpholino-4-(3,4,5-trimethoxyphenyl)-1(2H)-isoquinolinone) or pharmaceutically acceptable salt thereof, the examples include a much broader variety of 1-isoquinoline-3-carboxylates.

- IT 212498-74-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride 212499-20-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride 212499-85-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester, trihydrochloride 212500-32-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-49-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-73-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester  
(preparation of isoquinolinonecarboxylates for inhibiting neoplastic cells)
- RN 212498-74-3 HCAPLUS
- CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

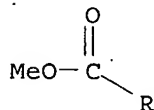
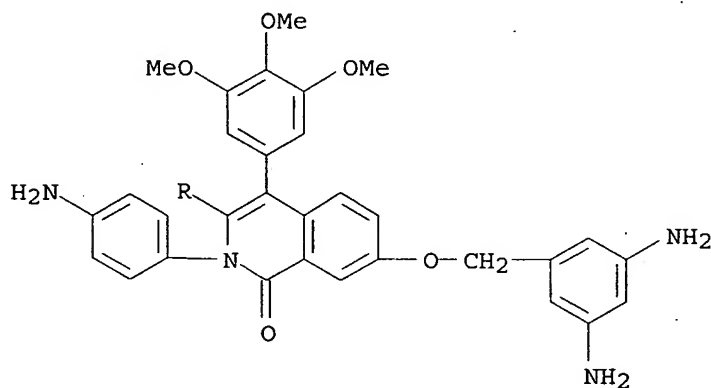


PAGE 2-A

● 3 HCl

RN 212499-20-2 HCAPLUS  
CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

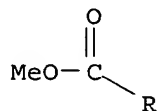
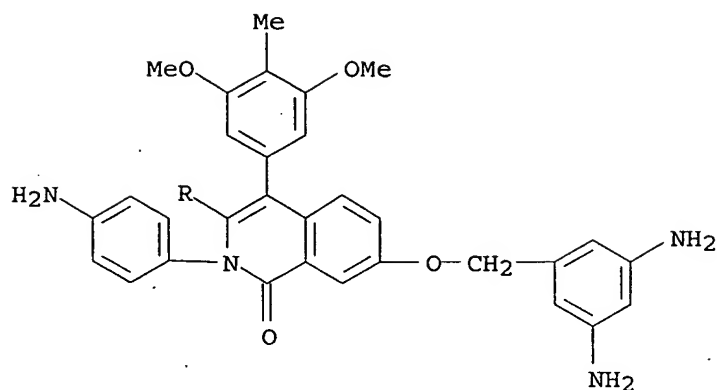


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● 3 HCl

RN 212499-85-9 HCAPLUS  
CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

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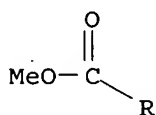
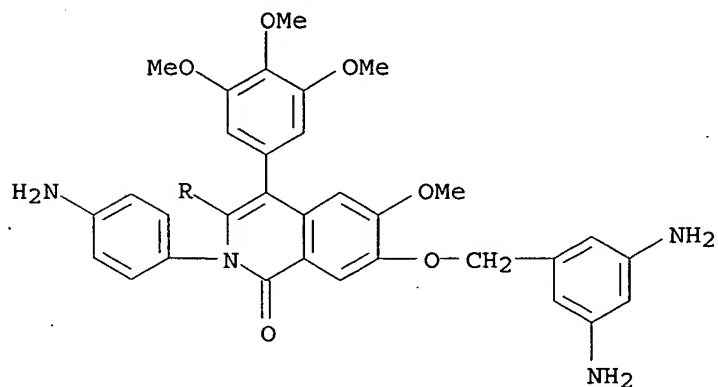


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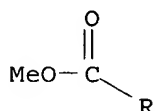
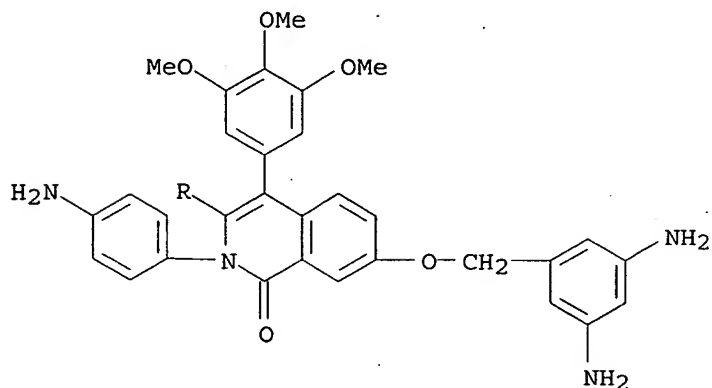
● 3 HCl

RN 212500-32-8 HCAPLUS

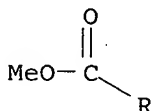
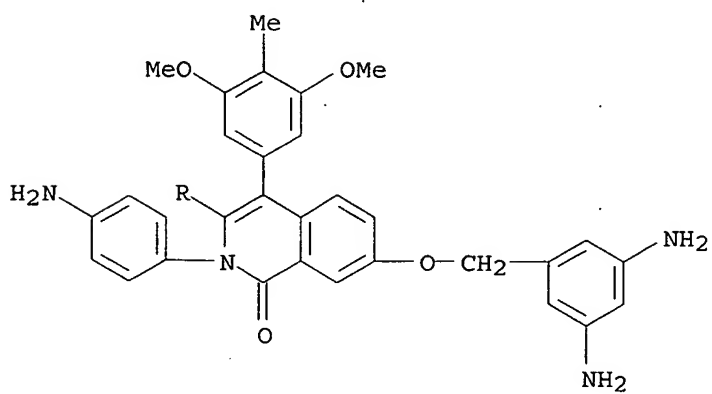
CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 212500-49-7 HCAPLUS  
 CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 212500-73-7 HCAPLUS  
 CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



IC ICM A61K031-535  
 INCL 514235200

CC 1-6 (Pharmacology)  
 Section cross-reference(s): 27

IT 212498-07-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 [(3,5-dimethoxyphenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-  
 (3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-09-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 [(3,4-dimethoxyphenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-  
 (3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-11-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 [(2,3-dimethoxyphenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-  
 (3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-13-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-6-methoxy-7-[(2-methoxyphenyl)methoxy]-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-16-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-6-methoxy-7-[(4-methoxyphenyl)methoxy]-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-19-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 (1H-benzimidazol-2-ylmethoxy)-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, dihydrochloride 212498-22-1P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-  
 [[(4-methylphenyl)sulfonyl]oxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-,  
 methyl ester, monohydrochloride 212498-25-4P,  
 3-Isoquinolinecarboxylic acid, 2-[4-[(1,1-  
 dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-7-(4-  
 pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester  
 212498-29-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-,  
 methyl ester, dihydrochloride 212498-31-2P, 3-  
 Isoquinolinecarboxylic acid, 2-[4-[(1,1-  
 dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-7-(3-  
 pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester  
 212498-33-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-1-oxo-7-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-,  
 methyl ester, dihydrochloride 212498-35-6P, 3-  
 Isoquinolinecarboxylic acid, 2-[4-[(1,1-  
 dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-7-(2-  
 pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester  
 212498-37-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-,  
 methyl ester, dihydrochloride 212498-39-0P, 3-  
 Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[(4-  
 nitrophenyl)methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl  
 ester, monohydrochloride 212498-41-4P, 3-Isoquinolinecarboxylic  
 acid, 2-(4-aminophenyl)-1,2-dihydro-7-[(3-nitrophenyl)methoxy]-1-  
 oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-43-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-7-[(2-nitrophenyl)methoxy]-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-45-8P, 3-Isoquinolinecarboxylic acid, 4-(4-bromo-3,5-  
 dimethoxyphenyl)-2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-  
 1,2-dihydro-6-methoxy-1-oxo-7-(phenylmethoxy)-, methyl ester  
 212498-47-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-  
 (4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-  
 (phenylmethoxy)-, methyl ester, monohydrochloride 212498-49-2P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-  
 dimethoxyphenyl)-1,2-dihydro-7-hydroxy-6-methoxy-1-oxo-, methyl  
 ester 212498-51-6P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-7-  
 hydroxy-6-methoxy-1-oxo-, methyl ester, monohydrochloride

212498-53-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester, dihydrochloride 212498-55-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(3-pyridinylmethoxy)-, methyl ester, dihydrochloride 212498-57-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester, dihydrochloride 212498-59-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(2-quinolinylmethoxy)-, methyl ester, dihydrochloride 212498-60-7P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-2-(4-morpholinyl)-1-oxo-7-(phenylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-62-9P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-7-hydroxy-2-(4-morpholinyl)-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-64-1P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-2-(4-morpholinyl)-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212498-65-2P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-2-(4-morpholinyl)-1-oxo-7-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212498-67-4P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-2-(4-morpholinyl)-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212498-68-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-6-methoxy-7-[(5-methyl-1H-imidazol-4-yl)methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-70-9P, 3-Isoquinolinecarboxylic acid, 7-(cyclopropylmethoxy)-2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-72-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-(cyclopropylmethoxy)-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212498-73-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[6-(hydroxymethyl)-2-pyridinyl]methoxy]-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212498-74-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride 212498-75-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-(1H-benzimidazol-2-ylmethoxy)-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212498-76-5P, 3-Isoquinolinecarboxylic acid, 2-(2,6-dioxo-4-piperidinyl)-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-77-6P, 3-Isoquinolinecarboxylic acid, 2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-8-(phenylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-78-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(phenylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-79-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-8-hydroxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212498-80-1P, 3-Isoquinolinecarboxylic acid, 4-(4-bromo-3,5-dimethoxyphenyl)-2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-7-(phenylmethoxy)-, methyl ester 212498-81-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(phenylmethoxy)-, methyl ester, monohydrochloride 212498-82-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-

dihydro-7-hydroxy-1-oxo-, methyl ester 212498-83-4P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-  
 dimethoxyphenyl)-1,2-dihydro-7-hydroxy-1-oxo-, methyl ester,  
 monohydrochloride 212498-84-5P, 3-Isoquinolinecarboxylic acid,  
 1,2-dihydro-1-oxo-2-phenyl-7-(phenylmethoxy)-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212498-85-6P,  
 3-Isoquinolinecarboxylic acid, 1,2-dihydro-7-hydroxy-1-oxo-2-  
 phenyl-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212498-86-7P,  
 3-Isoquinolinecarboxylic acid, 1,2-dihydro-1-oxo-2-phenyl-7-(2-  
 quinolinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester,  
 monohydrochloride 212498-87-8P, 3-Isoquinolinecarboxylic acid,  
 1,2-dihydro-1-oxo-2-phenyl-7-(4-quinolinylmethoxy)-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-88-9P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-1-oxo-2-  
 phenyl-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl  
 ester, monohydrochloride 212498-89-0P, 3-Isoquinolinecarboxylic  
 acid, 1,2-dihydro-1-oxo-2-phenyl-7-(3-pyridinylmethoxy)-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-90-3P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-1-oxo-2-  
 phenyl-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl  
 ester, monohydrochloride 212498-91-4P, 3-Isoquinolinecarboxylic  
 acid, 1,2-dihydro-2-(4-morpholinyl)-1-oxo-7-(2-quinolinylmethoxy)-  
 4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-92-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 [[3-(dimethylamino)phenyl]methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, dihydrochloride 212498-93-6P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-  
 7-(pyrazinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester,  
 dihydrochloride 212498-94-7P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-7-[(3,5-dimethoxyphenyl)methoxy]-1,2-dihydro-1-  
 oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-95-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 [(2,5-dimethoxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester, monohydrochloride  
 212498-96-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-  
 (4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(phenylmethoxy)-  
 , methyl ester, monohydrochloride 212498-97-0P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-  
 dimethoxyphenyl)-1,2-dihydro-7-hydroxy-1-oxo-, methyl ester  
 212498-98-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-  
 (4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(2-  
 pyridinylmethoxy)-, methyl ester, dihydrochloride 212498-99-2P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-  
 dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(3-pyridinylmethoxy)-, methyl  
 ester, dihydrochloride 212499-00-8P, 3-Isoquinolinecarboxylic  
 acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-  
 dihydro-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester,  
 dihydrochloride 212499-01-9P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-  
 oxo-7-(2-quinolinylmethoxy)-, methyl ester, dihydrochloride  
 212499-02-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-  
 (4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(2-  
 pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-03-1P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-  
 dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(3-pyridinylmethoxy)-, methyl  
 ester, dihydrochloride 212499-04-2P, 3-Isoquinolinecarboxylic  
 acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-  
 dihydro-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester,  
 dihydrochloride 212499-05-3P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-1-

oxo-7-(2-quinolinylmethoxy)-, methyl ester, dihydrochloride  
 212499-06-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-7-[(3,5-dimethoxyphenyl)methoxy]-1,2-dihydro-1-oxo-, methyl ester, monohydrochloride 212499-07-5P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3-aminophenyl)methoxy]-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-, methyl ester, dihydrochloride 212499-09-7P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-7-[(3,5-dimethoxyphenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-, methyl ester, monohydrochloride 212499-11-1P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-7-[(2,5-dimethoxyphenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-, methyl ester, monohydrochloride 212499-13-3P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-7-(cyanomethoxy)-1,2-dihydro-6-methoxy-1-oxo-, methyl ester, monohydrochloride 212499-15-5P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-7-(1-isoquinolinylmethoxy)-6-methoxy-1-oxo-, methyl ester, dihydrochloride 212499-17-7P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-hydroxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-19-9P, 3-Isoquinolinecarboxylic acid, 2-[4-[(9H-fluoren-9-ylmethoxy)carbonyl]amino]phenyl]-1,2-dihydro-7-hydroxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-20-2P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride 212499-21-3P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[6-(hydroxymethyl)-2-pyridinyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-22-4P,  
 3-Isoquinolinecarboxylic acid, 2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-7-[[4-(methoxycarbonyl)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-23-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[4-(methoxycarbonyl)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212499-25-7P, 3-Isoquinolinecarboxylic acid, 2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-7-[[3-(methoxycarbonyl)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-27-9P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(4-carboxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, 3-methyl ester, monohydrochloride 212499-29-1P, 3-Isoquinolinecarboxylic acid, 7-[(3-carboxyphenyl)methoxy]-2-[4-[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, 3-methyl ester 212499-31-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3-carboxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, 3-methyl ester, monohydrochloride 212499-32-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-33-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[3-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-34-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[3-(methylamino)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-35-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[2-(hydroxymethyl)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-,

methyl ester, monohydrochloride 212499-36-0P,  
3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[3-(hydroxymethyl)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212499-37-1P,  
3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[4-(hydroxymethyl)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212499-38-2P,  
3-Isoquinolinecarboxylic acid, 2-[4-(acetylamino)phenyl]-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-39-3P, 3-Isoquinolinecarboxylic acid, 2-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-7-[(1-oxido-2-pyridinyl)methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-40-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[(1-oxido-2-pyridinyl)methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-41-7P, 3-Isoquinolinecarboxylic acid, 7-[(3-aminophenyl)methoxy]-1,2-dihydro-2-(4-morpholinyl)-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212499-42-8P, 3-Isoquinolinecarboxylic acid, 7-(1H-benzimidazol-2-ylmethoxy)-1,2-dihydro-2-(4-morpholinyl)-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-43-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-8-hydroxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-44-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-45-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-46-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-47-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(2-quinolinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-48-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(2-phenylethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, monohydrochloride 212499-49-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-(1H-imidazol-4-ylmethoxy)-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dihydrochloride 212499-50-8P, 3-Isoquinolinecarboxylic acid, 7-[[4-(aminomethyl)phenyl]methoxy]-1,2-dihydro-2-[4-[(methylsulfonyl)amino]phenyl]-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-51-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-(1H-benzimidazol-2-ylmethoxy)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-, methyl ester, dihydrochloride 212499-52-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-7-[(3,5-dimethoxyphenyl)methoxy]-1,2-dihydro-1-oxo-, methyl ester, monohydrochloride 212499-53-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-7-[[6-(hydroxymethyl)-2-pyridinyl]methoxy]-1-oxo-, methyl ester, dihydrochloride 212499-54-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(pyrazinylmethoxy)-, methyl ester, dihydrochloride 212499-55-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-7-(2-furanylmethoxy)-1,2-dihydro-6-methoxy-1-oxo-, methyl ester, monohydrochloride 212499-56-4P, 3-Isoquinolinecarboxylic acid, 4-(3,5-dimethoxy-4-methylphenyl)-2-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-6-methoxy-1-oxo-7-(phenylmethoxy)-, methyl ester 212499-57-5P,

3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(phenylmethoxy)-, methyl ester, monohydrochloride 212499-58-6P,  
 3-Isoquinolinecarboxylic acid, 4-(3,5-dimethoxy-4-methylphenyl)-2-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-7-hydroxy-6-methoxy-1-oxo-, methyl ester 212499-59-7P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-hydroxy-6-methoxy-1-oxo-, methyl ester, monohydrochloride 212499-60-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-61-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(3-pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-62-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-64-4P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(2-quinolinylmethoxy)-, methyl ester, dihydrochloride 212499-67-7P,  
 3-Isoquinolinecarboxylic acid, 4-(3,5-dimethoxy-4-methylphenyl)-2-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-1-oxo-7-(phenylmethoxy)-, methyl ester 212499-70-2P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(phenylmethoxy)-, methyl ester, monohydrochloride 212499-73-5P, 3-Isoquinolinecarboxylic acid, 4-(3,5-dimethoxy-4-methylphenyl)-2-[4-[[[(1,1-dimethylethoxy)carbonyl]amino]phenyl]-1,2-dihydro-7-hydroxy-1-oxo-, methyl ester 212499-76-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-hydroxy-1-oxo-, methyl ester, monohydrochloride 212499-79-1P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-80-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(3-pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-81-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester, dihydrochloride 212499-82-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(2-quinolinylmethoxy)-, methyl ester, dihydrochloride 212499-84-8P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-(1-isoquinolinylmethoxy)-1-oxo-, methyl ester, dihydrochloride 212499-85-9P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester, trihydrochloride 212499-88-2P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-[[6-(hydroxymethyl)-2-pyridinyl]methoxy]-1-oxo-, methyl ester, dihydrochloride 212499-90-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-[[3-(methylamino)phenyl]methoxy]-1-oxo-, methyl ester, dihydrochloride 212499-92-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-[[2-(hydroxymethyl)phenyl]methoxy]-1-oxo-, methyl ester, monohydrochloride 212499-94-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-

oxo-7-(pyrazinylmethoxy)-, methyl ester, dihydrochloride  
 212499-96-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212499-98-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, sulfate (1:1)  
 212500-00-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dimethanesulfonate 212500-02-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-03-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, sulfate (1:1) 212500-05-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester, dimethanesulfonate 212500-07-7P, 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-212500-10-2P, 3-Isoquinolinecarboxylic acid, 4-(3-bromo-4,5-dimethoxyphenyl)-1,2-dihydro-6,7-dimethoxy-1-oxo-, methyl ester 212500-13-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-4-(3-hydroxy-4,5-dimethoxyphenyl)-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester, dihydrochloride 212500-15-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-4-(4-hydroxy-3,5-dimethoxyphenyl)-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester 212500-17-9P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6-methoxy-2-(4-morpholinyl)-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-19-1P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6-methoxy-2-(4-morpholinyl)-1-oxo-7-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-21-5P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6-methoxy-2-(4-morpholinyl)-1-oxo-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-23-7P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6-methoxy-1-oxo-2-phenyl-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-25-9P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6-methoxy-1-oxo-2-phenyl-7-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-27-1P, 3-Isoquinolinecarboxylic acid, 1,2-dihydro-6-methoxy-1-oxo-2-phenyl-7-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-28-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3-aminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-30-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-31-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-(1H-benzimidazol-2-ylmethoxy)-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-32-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-34-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester 212500-36-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(3-pyridinylmethoxy)-, methyl ester 212500-37-3P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-6-methoxy-1-oxo-7-(4-

pyridinylmethoxy)-, methyl ester 212500-38-4P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-  
 7-(3-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester  
 212500-39-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-  
 [(2,5-dimethoxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212500-40-8P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-  
 dimethoxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212500-41-9P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-  
 dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-, methyl  
 ester 212500-42-0P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-4-(4-bromo-3,5-dimethoxyphenyl)-1,2-dihydro-1-  
 oxo-7-(3-pyridinylmethoxy)-, methyl ester 212500-43-1P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-bromo-3,5-  
 dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-, methyl  
 ester 212500-44-2P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-7-[(3-aminophenyl)methoxy]-4-(4-bromo-3,5-  
 dimethoxyphenyl)-1,2-dihydro-1-oxo-, methyl ester 212500-45-3P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-  
 dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-, methyl  
 ester 212500-46-4P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-  
 oxo-7-(3-pyridinylmethoxy)-, methyl ester 212500-47-5P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[[3-  
 (dimethylamino)phenyl]methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212500-48-6P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-  
 7-(pyrazinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester  
 212500-49-7P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-  
 4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-50-0P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[6-  
 (hydroxymethyl)-2-pyridinyl]methoxy]-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212500-51-1P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(4-  
 carboxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, 3-methyl ester 212500-52-2P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3-  
 carboxyphenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, 3-methyl ester 212500-53-3P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[4-  
 [(4-methyl-1-piperazinyl)carbonyl]phenyl]methoxy]-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212500-54-4P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[3-  
 [(4-methyl-1-piperazinyl)carbonyl]phenyl]methoxy]-1-oxo-4-(3,4,5-  
 trimethoxyphenyl)-, methyl ester 212500-57-7P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-7-[[3-  
 (methylamino)phenyl]methoxy]-1-oxo-4-(3,4,5-trimethoxyphenyl)-,  
 methyl ester 212500-60-2P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-1,2-dihydro-7-[[2-(hydroxymethyl)phenyl]methoxy]-  
 1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester  
 (preparation of isoquinolinonecarboxylates for inhibiting neoplastic  
 cells)  
 IT 212500-64-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-  
 dihydro-1-oxo-8-(2-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-,  
 methyl ester 212500-66-8P, 3-Isoquinolinecarboxylic acid,  
 2-(4-aminophenyl)-1,2-dihydro-1-oxo-8-(3-pyridinylmethoxy)-4-  
 (3,4,5-trimethoxyphenyl)-, methyl ester 212500-67-9P,  
 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-

8-(4-pyridinylmethoxy)-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212500-68-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-7-[[6-(hydroxymethyl)-2-pyridinyl]methoxy]-1-oxo-, methyl ester 212500-69-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(pyrazinylmethoxy)-, methyl ester 212500-70-4P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester 212500-71-5P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(3-pyridinylmethoxy)-, methyl ester 212500-72-6P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(2-pyridinylmethoxy)-, methyl ester 212500-73-7P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester 212500-74-8P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-[[6-(hydroxymethyl)-2-pyridinyl]methoxy]-1-oxo-, methyl ester 212500-75-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-[[3-(methylamino)phenyl]methoxy]-1-oxo-, methyl ester 212500-76-0P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-7-[[2-[(hydroxymethyl)amino]phenyl]methoxy]-1-oxo-, methyl ester 212500-77-1P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-7-(pyrazinylmethoxy)-, methyl ester 212500-78-2P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-4-(4-chloro-3,5-dimethoxyphenyl)-1,2-dihydro-1-oxo-7-(4-pyridinylmethoxy)-, methyl ester 212501-80-9P, 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester 212501-90-1P, 3-Isoquinolinecarboxylic acid, 2-(4-carboxyphenyl)-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, 3-methyl ester, sodium salt

(preparation of isoquinolinonecarboxylates for inhibiting neoplastic cells)

REFERENCE COUNT: 171 THERE ARE 171 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER: 2000:151451 HCAPLUS

DOCUMENT NUMBER: 132:207769

TITLE: Preparation of isoquinolinones as effective component in medicine

INVENTOR(S): Ukita, Shinzo; Ohmori, Kanji; Ikeo, Tomihiro

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 148 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000072675	A2	20000307	JP 1998-240446	1998

PRIORITY APPLN. INFO.:

JP 1998-240446

0826

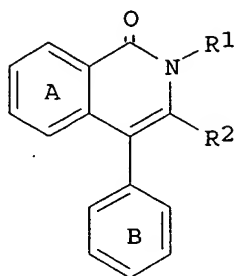
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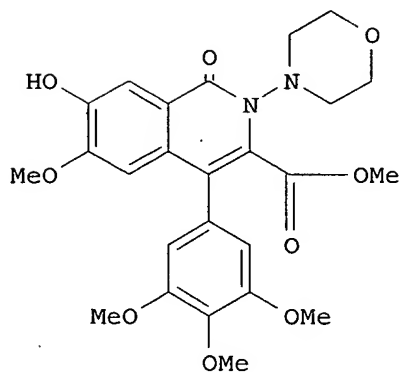
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MARPAT 132:207769

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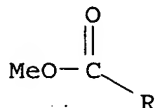
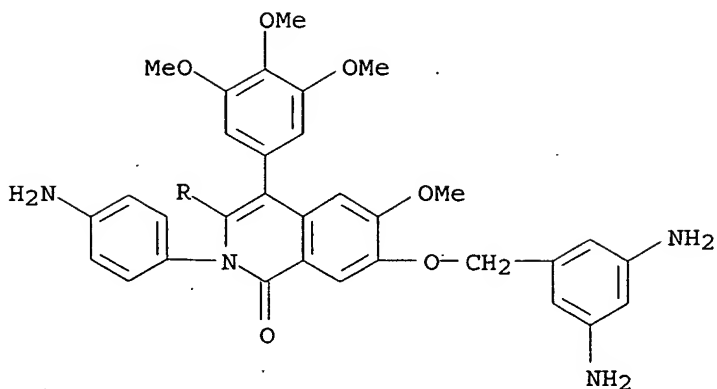
I



II

- AB Title compds. [I; ring A and ring B equivalent or different, substituted or unsubstituted benzene ring; R1 = H, N(CH3)2, 4-H2NC6H4, 4-CH3OCOC6H4, alkyl, cycloalkyl, aryl, complex cyclic; R2 = COOH, COOCH3, COOCH2CH3, COOCH2C6H5, COO(CH2)3CH3] and pharmaceutical acceptable salts are prepared and tested as PDEV inhibitors. The title compound II was prepared
- IT 212498-74-3P 212499-20-2P 212499-85-9P  
(preparation of isoquinolinones as effective component in medicine)
- RN 212498-74-3 HCAPLUS
- CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

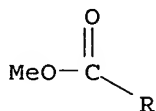
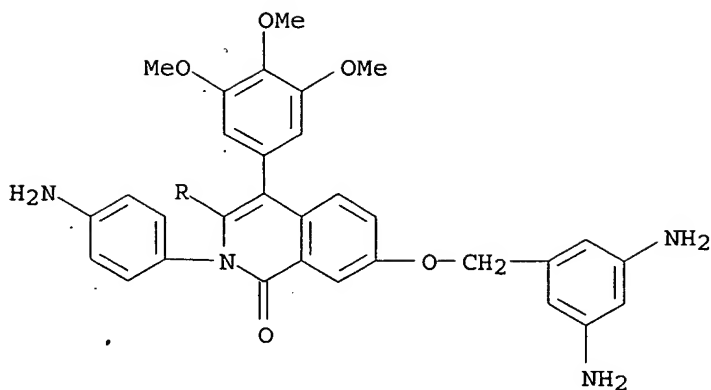


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● 3 HCl

RN 212499-20-2 HCAPLUS  
 CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

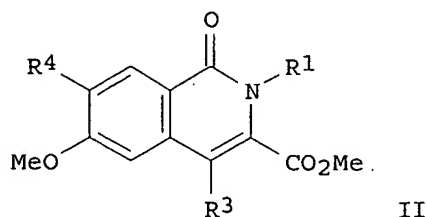
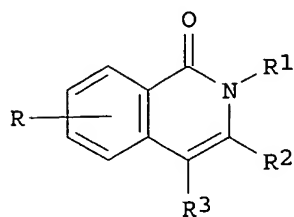
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ACCESSION NUMBER: 1998:608601 HCAPLUS  
 DOCUMENT NUMBER: 129:216521  
 TITLE: Preparation of 1-isoquinolinone-3-carboxylates  
 as PDE V inhibitors  
 INVENTOR(S): Ukita, Tatsuzo; Omori, Kenji; Ikeo, Tomihiro  
 PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 299 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
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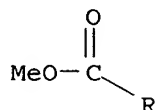
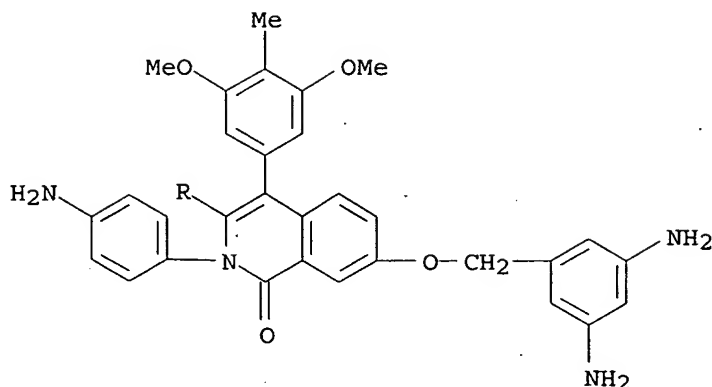
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PRIORITY APPLN. INFO.:			JP 1997-44408	A 1997 0227
			WO 1998-JP715	W 1998 0223

OTHER SOURCE(S): MARPAT 129:216521  
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AB Title compds. [I; R = H or substituent(s); R1 = H, NH2,  
 (cyclo)alkyl, heterocyclyl, aryl, etc.; R2 = (esterified) CO2H,  
 CONH2, N-attached heterocyclylcarbonyl, etc.; R3 = (un)substituted

PAGE 1-A



PAGE 2-A

● 3 HCl

IC ICM A61K031-47  
 ICS A61K031-47; A61K031-495; A61K031-535; A61K031-54; C07D217-26;  
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 C07D405-06; C07D405-12; C07D409-12; C07D413-04; C07D491-056  
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 Section cross-reference(s): 1, 63  
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 260414-73-1P  
 (preparation of isoquinolinones as effective component in medicine)

L32 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

USHA SHRESTHA EIC 1600 REM 1A64

Ph] were prepared as PDE V inhibitors (no data). Thus, 5-benzyloxy-4-methoxy-2-(3,4,5-trimethoxybenzoyl)benzoic acid was cyclocondensed with  $\text{CH}_2(\text{CO}_2\text{CMe}_3)_2$  and the hydrated product cyclocondensed with 4-( $\text{H}_2\text{N}$ ) $\text{C}_6\text{H}_4\text{NHCOCMe}_3$  to give, in 4 addnl. steps, title compound II [ $\text{R}_1 = \text{C}_6\text{H}_4(\text{NH}_2)-4$ ,  $\text{R}_3 = \text{C}_6\text{H}_2(\text{OMe})_3-3,4,5$ ,  $\text{R}_4 = 2\text{-pyridylmethoxy}$ ].

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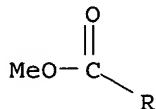
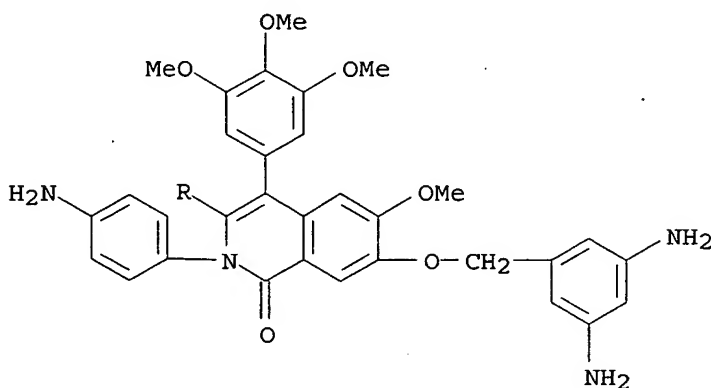
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(preparation of 1-isoquinolinone-3-carboxylates as PDE V inhibitors)

RN 212498-74-3 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-6-methoxy-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



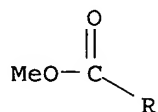
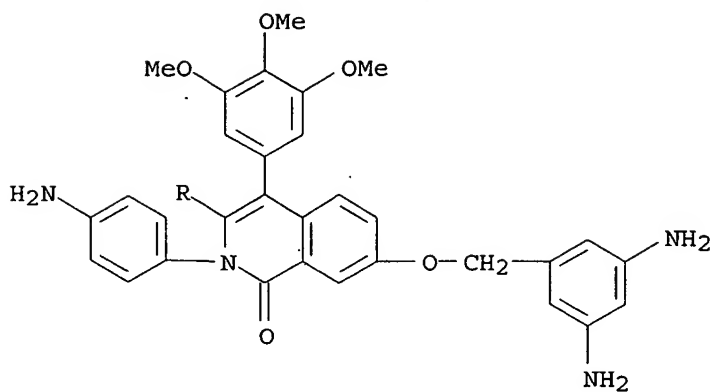
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● 3 HCl

RN 212499-20-2 HCAPLUS

CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-1,2-dihydro-1-oxo-4-(3,4,5-trimethoxyphenyl)-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

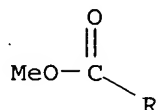
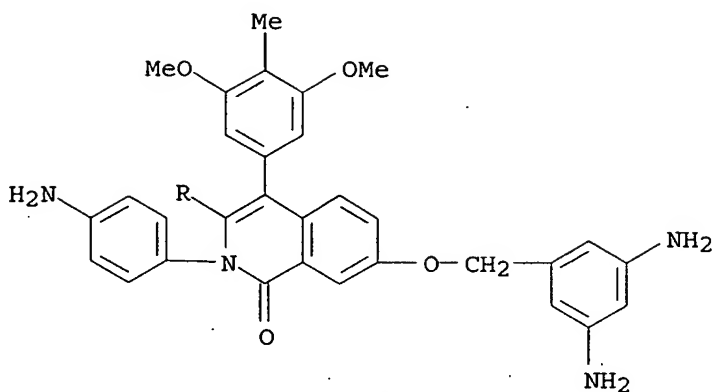


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● 3 HCl

RN 212499-85-9 HCAPLUS  
 CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester, trihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

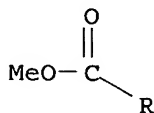
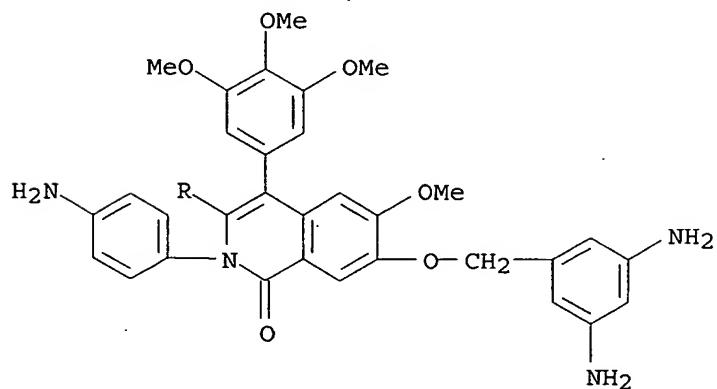


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● 3 HCl

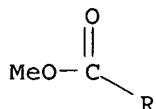
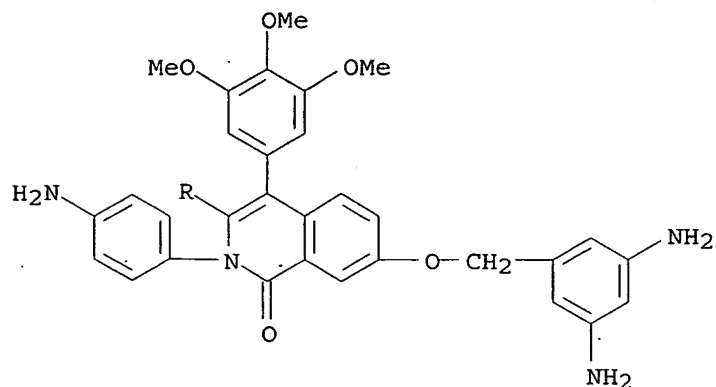
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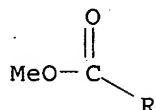
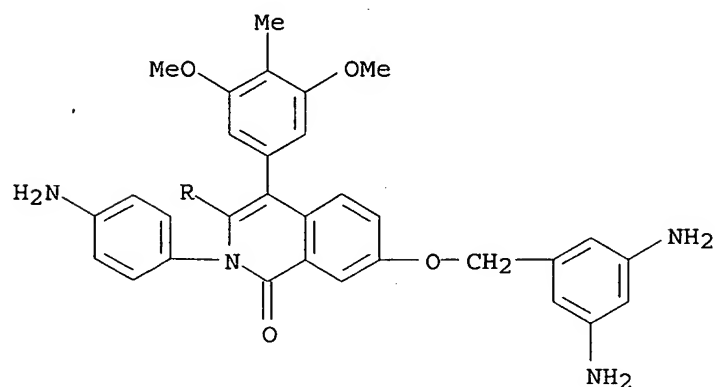


USHA SHRESTHA EIC 1600 REM 1A64

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RN 212500-73-7 HCAPLUS  
 CN 3-Isoquinolinecarboxylic acid, 2-(4-aminophenyl)-7-[(3,5-diaminophenyl)methoxy]-4-(3,5-dimethoxy-4-methylphenyl)-1,2-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



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 ICS A61K031-47; C07D401-12; C07D409-12; C07D401-04; C07D401-06;

C07D405-04; C07D405-06; C07D491-04; C07D413-04; C07D401-10;  
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(preparation of 1-isoquinolinone-3-carboxylates as PDE V inhibitors)

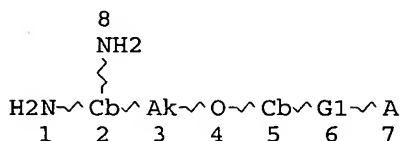
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(preparation of 1-isoquinolinone-3-carboxylates as PDE V inhibitors)

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 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

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DEFAULT ECLEVEL IS LIMITED

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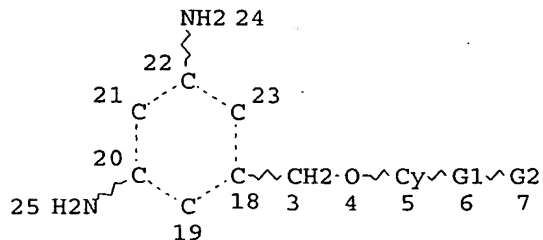
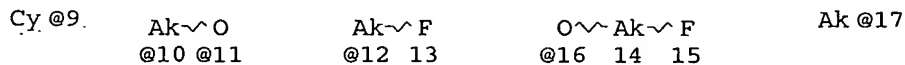
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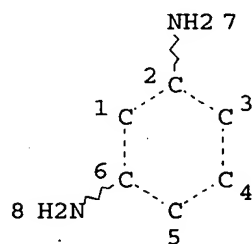
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L38 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2006:48551 HCAPLUS

DOCUMENT NUMBER: 144:139035  
 TITLE: Optically active phenylenediamines, and their polyimides or polyimide precursors  
 INVENTOR(S): Sahade, Daniel Antonio; Oda, Takuo  
 PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006016303	A2	20060119	JP 2004-187213	2004 0625
PRIORITY APPLN. INFO.:				JP 2004-164336 A 2004 0602

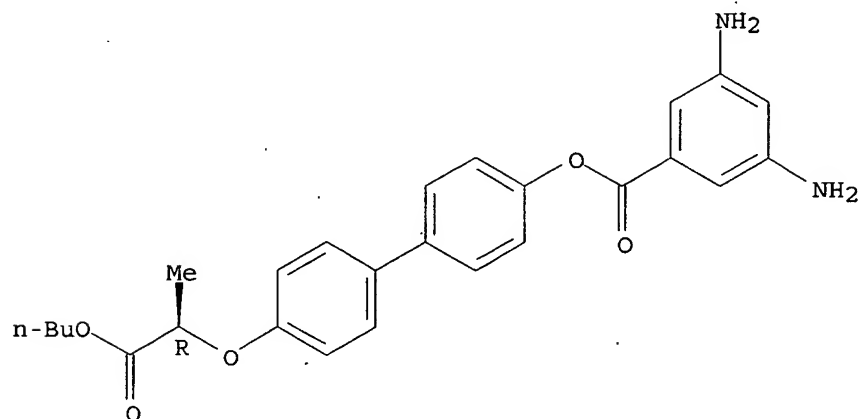
AB The phenylenediamines are  $PX_1X_2OG$  or  $PX_1(CH_2)_nOX_2OG$  [ $P$  = diaminophenyl;  $X_1 = O, CH_2O, CO_2$ ;  $X_2 =$  phenylene, diphenylene;  $G = (R)$ - or  $(S)$ - $X_3C^*HX_4X_5$ ;  $*$  = chiral point;  $X_3 =$  single bond,  $CH_2$ ;  $x_4 = CH_2, CO_2$ ;  $X_5 = C1-10$  alkyl;  $X_6 = CF_3, Me$ ;  $n = 1-10$ ]. The polyimides or polyimide precursors bearing optically active groups on side chains are useful for liquid crystal alignment films for displays.

IT 873691-24-8P  
 (optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)

RN 873691-24-8 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-[(1R)-2-butoxy-1-methyl-2-oxoethoxy][1,1'-biphenyl]-4-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 873691-29-3P  
 (optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)

RN 873691-29-3 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-[(1R)-2-butoxy-1-methyl-2-

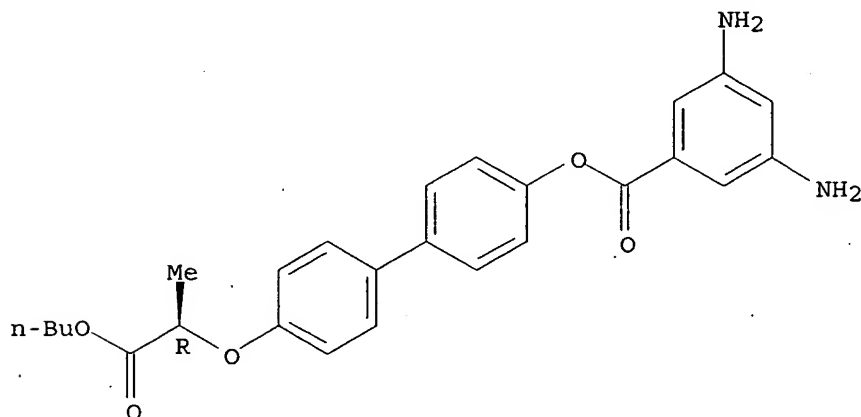
oxoethoxyl [1,1'-biphenyl]-4-yl ester, polymer with  
4,4'-[1,5-pentanediy]bis(oxy)]bis[benzenamine] and  
tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX  
NAME)

CM 1

CRN 873691-24-8

CMF C26 H28 N2 O5

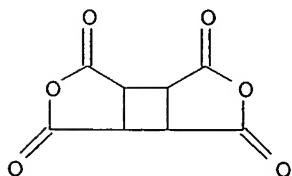
Absolute stereochemistry.



CM 2

CRN 4415-87-6

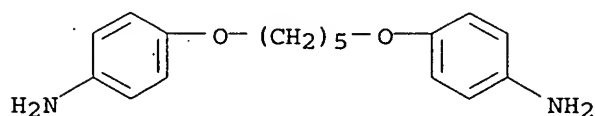
CMF C8 H4 O6



CM 3

CRN 2391-56-2

CMF C17 H22 N2 O2



CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

Section cross-reference(s): 25, 35, 38

IT 34451-19-9P 122164-06-1P 873303-97-0P 873691-14-6P  
 873691-15-7P 873691-16-8P 873691-17-9P 873691-18-0P  
 873691-19-1P 873691-20-4P 873691-21-5P 873691-22-6P  
 873691-23-7P 873691-24-8P  
 (optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)

IT 873303-98-1P 873691-25-9P 873691-26-0P 873691-27-1P  
 873691-28-2P 873691-29-3P 873691-30-6P 873691-31-7P  
 873691-32-8P  
 (optically active phenylenediamines for polyimides or polyimide precursors for liquid crystal alignment films)

L38 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:467943 HCAPLUS

DOCUMENT NUMBER: 143:16591

TITLE: Alignment agents for liquid crystals and display devices using them

INVENTOR(S): Nakada, Shoichi; Kumano, Atsushi

PATENT ASSIGNEE(S): JSR Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

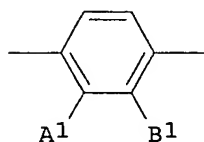
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

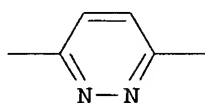
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005139288	A2	20050602	JP 2003-376792	2003 1106
KR 2005043686	A	20050511	KR 2004-89639	2004 1105
PRIORITY APPLN. INFO.:			JP 2003-376792	A 2003 1106

GI



I



II

AB The agents contain polymers having  $\geq 1$  side chains selected from I (A1, B1 = H, halo, CN; A1 and/or B1 = halo or CN) and II. The display devices have liquid-crystal alignment films of the agents. The films show stable perpendicular alignment.

IT 852335-76-3P

(alignment agents with stable perpendicular alignment for liquid-crystal displays)

RN 852335-76-3 HCAPLUS

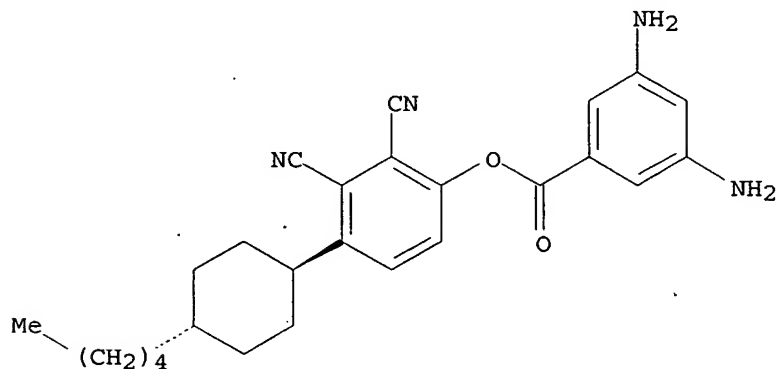
CN Benzoic acid, 3,5-diamino-, 2,3-dicyano-4-(trans-4-pentylcyclohexyl)phenyl ester, polymer with hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 852335-75-2

CMF C26 H30 N4 O2

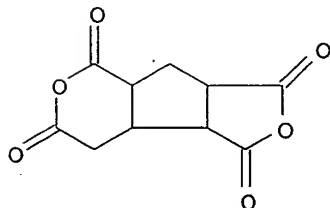
Relative stereochemistry.



CM 2

CRN 87078-75-9

CMF C10 H8 O6



IC ICM C09K019-56

ICS C08G073-10; G02F001-1337

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 852335-74-1P 852335-76-3P 852335-78-5P 852364-45-5P

(alignment agents with stable perpendicular alignment for liquid-crystal displays)

L38 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:175898 HCAPLUS

DOCUMENT NUMBER: 140:225892

TITLE: 1,3-Phenylenediamines bearing long side chains for polymers as alignment films for liquid crystal displays

INVENTOR(S): Tamura, Norihisa

PATENT ASSIGNEE(S): Chisso Corp., Japan; Chisso Petrochemical Corporation  
 SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004067589	A2	20040304	JP 2002-228918	2002 0806

PRIORITY APPLN. INFO.: JP 2002-228918  
 2002 0806

OTHER SOURCE(S): MARPAT 140:225892

AB The phenylenediamines bearing RA1B1A2B2A3B3A4O2C (A1-A3 = 1,4-cyclohexylene, 1,4-phenylene; A4 = 1,4-cyclohexylene, 1,4-phenylene, single bond; B1-B3 = single bond, CH2CH2; R = C1-20 alkyl; one of CH2 of R may be replaced with O) on position 5 are monomers for polyamic acids, polyimides, polyamide-polyimides, and polyamides. Alignment films manufactured from the polymers show no change of pretilt angles in accordance with change of rubbing or end use condition.

IT 664985-55-1DP, reaction product with Me iodide

664985-55-1P 664985-56-2P 664985-57-3P

664985-58-4P 664985-59-5P 664985-60-8P

664985-61-9P

(manufacture of phenylenediamines bearing long side chains for polyamic acid, polyamides, polyimides, polyamide-polyimides as alignment films for liquid crystal displays)

RN 664985-55-1 HCAPLUS

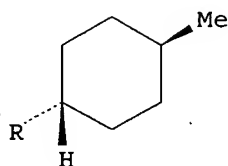
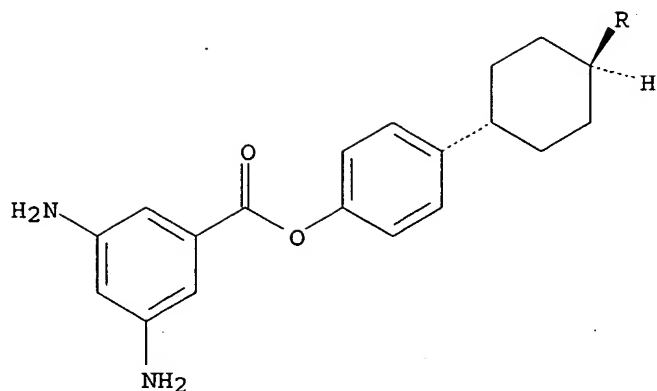
CN 1,4-Benzenedicarboxylic acid, polymer with 4-[(trans,trans)-4'-methyl[1,1'-bicyclohexyl]-4-yl]phenyl 3,5-diaminobenzoate and 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 664985-50-6

CMF C26 H34 N2 O2

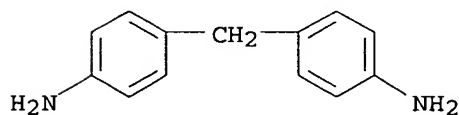
Relative stereochemistry.



CM 2

CRN 101-77-9

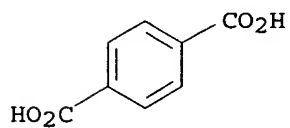
CMF C13 H14 N2



CM 3

CRN 100-21-0

CMF C8 H6 O4



RN 664985-55-1 HCAPLUS

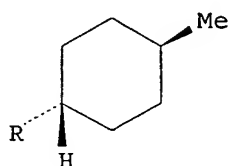
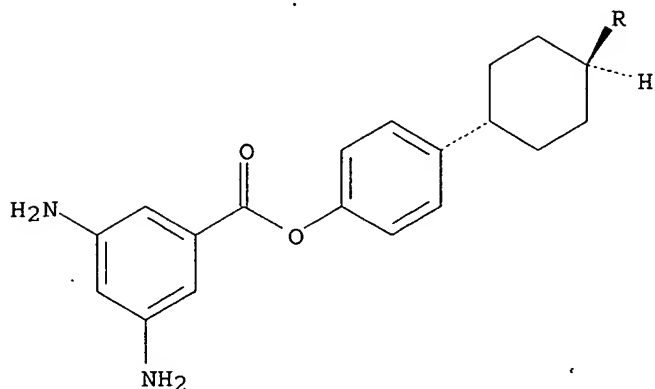
CN 1,4-Benzenedicarboxylic acid, polymer with 4-[(trans,trans)-4'-methyl[1,1'-bicyclohexyl]-4-yl]phenyl 3,5-diaminobenzoate and 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 664985-50-6

CMF C26 H34 N2 O2

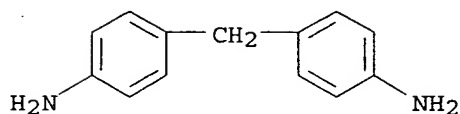
Relative stereochemistry.



CM 2

CRN 101-77-9

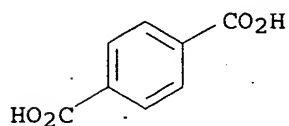
CMF C13 H14 N2



CM 3

CRN 100-21-0

CMF C8 H6 O4



RN 664985-56-2 HCAPLUS

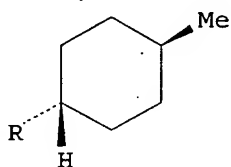
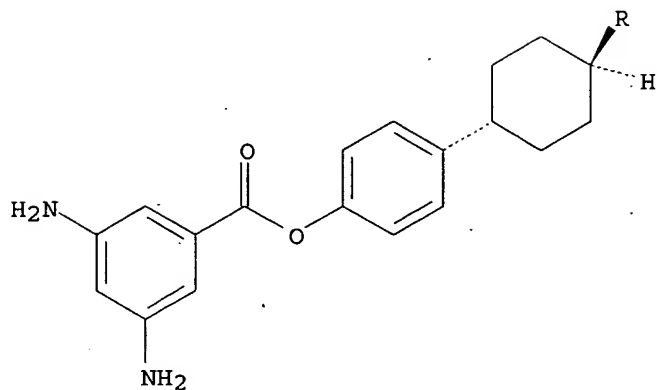
CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-methyl[1,1'-bicyclohexyl]-4'-yl]phenyl ester, polymer with 1,4-benzenedicarbonyl dichloride and 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 664985-50-6

CMF C26 H34 N2 O2

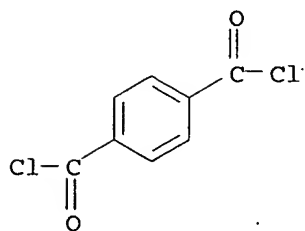
Relative stereochemistry.



CM 2

CRN 100-20-9

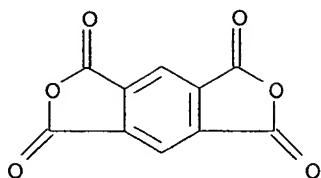
CMF C8 H4 Cl2 O2



CM 3

CRN 89-32-7

CMF C10 H2 O6



RN 664985-57-3 HCAPLUS

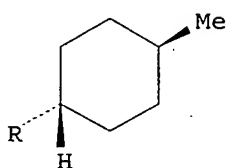
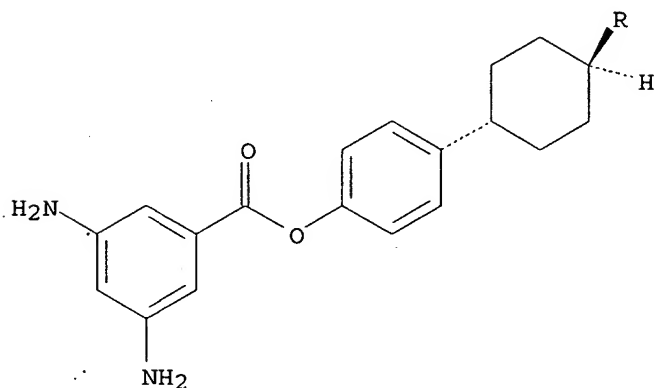
CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-methyl[1,1'-bicyclohexyl]-4-yl]phenyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, 4,4'-methylenebis[benzenamine] and tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

CM 1

CRN 664985-50-6

CMF C26 H34 N2 O2

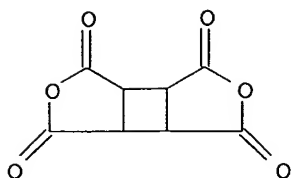
Relative stereochemistry.



CM 2

CRN 4415-87-6

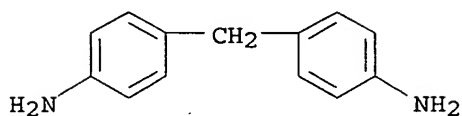
CMF C8 H4 O6



CM 3

CRN 101-77-9

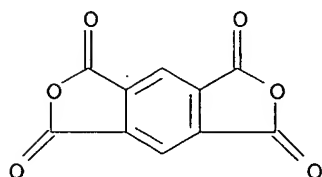
CMF C13 H14 N2



CM 4

CRN 89-32-7

CMF C10 H2 O6



RN 664985-58-4 HCAPLUS

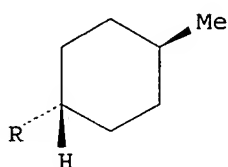
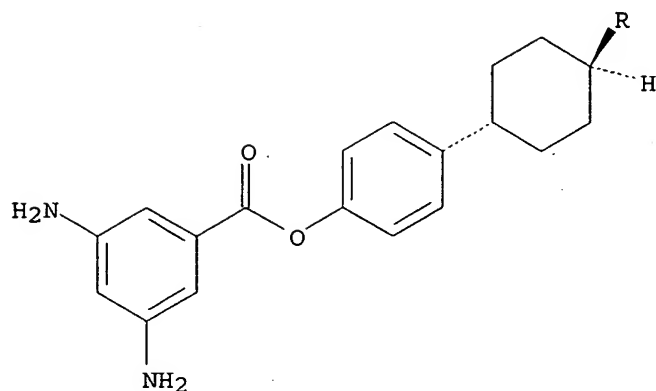
CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-methyl[1,1'-bicyclohexyl]-4-yl]phenyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone and tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

CM 1

CRN 664985-50-6

CMF C26 H34 N2 O2

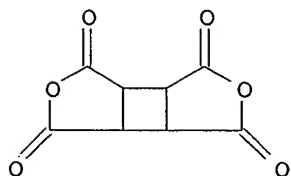
Relative stereochemistry.



CM 2

CRN 4415-87-6

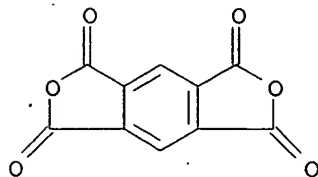
CMF C8 H4 O6



CM 3

CRN 89-32-7

CMF C10 H2 O6



RN 664985-59-5 HCAPLUS

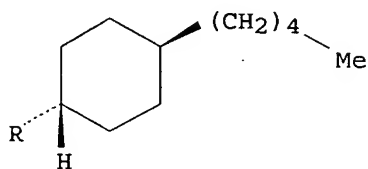
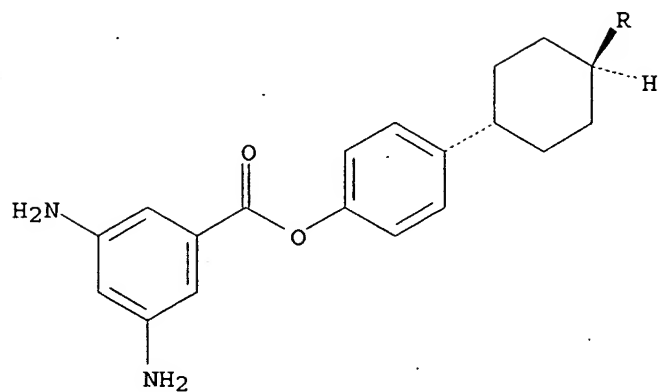
CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl]phenyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone and tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

CM 1

CRN 664985-51-7

CMF C30 H42 N2 O2

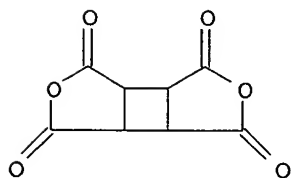
Relative stereochemistry.



CM 2

CRN 4415-87-6

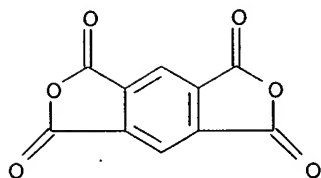
CMF C8 H4 O6



CM 3

CRN 89-32-7

CMF C10 H2 O6



RN 664985-60-8 HCAPLUS

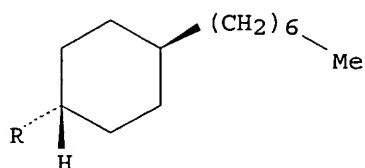
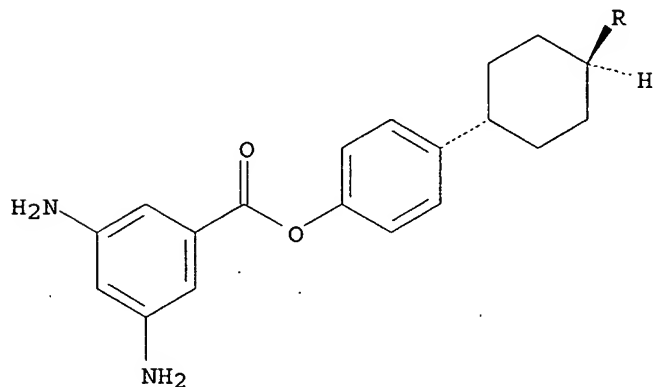
CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-heptyl[1,1'-bicyclohexyl]-4-yl]phenyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone and tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

CM 1

CRN 664985-52-8

CMF C32 H46 N2 O2

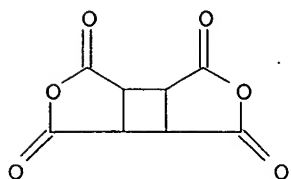
Relative stereochemistry.



CM 2

CRN 4415-87-6

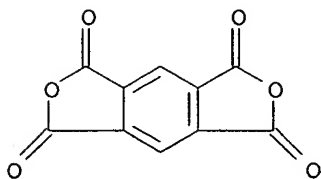
CMF C8 H4 O6



CM 3

CRN 89-32-7

CMF C10 H2 O6



RN 664985-61-9 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-[(trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl][1,1'-biphenyl]-4-yl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone and tetrahydrocyclobuta[1,2-c:3,4-c']difurantetrone (9CI) (CA INDEX NAME)

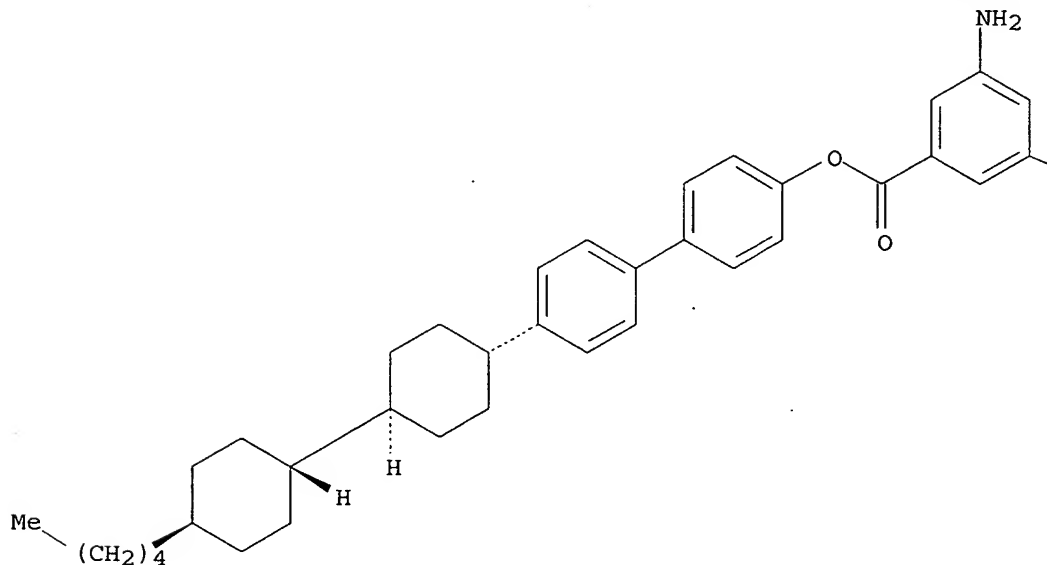
CM 1

CRN 664985-53-9

CMF C36 H46 N2 O2

Relative stereochemistry.

PAGE 1-A



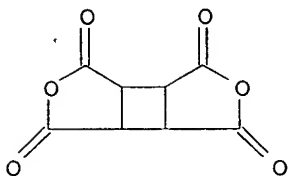
PAGE 1-B

NH<sub>2</sub>

CM 2

CRN 4415-87-6

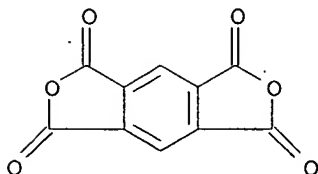
CMF C8 H4 O6



CM 3

CRN 89-32-7

CMF C10 H2 O6



IT 664985-54-0P

(manufacture of phenylenediamines bearing long side chains for polyamic acid, polyamides, polyimides, polyamide-polyimides as alignment films for liquid crystal displays)

RN 664985-54-0 HCAPLUS

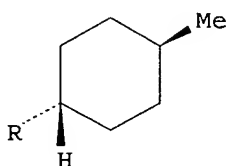
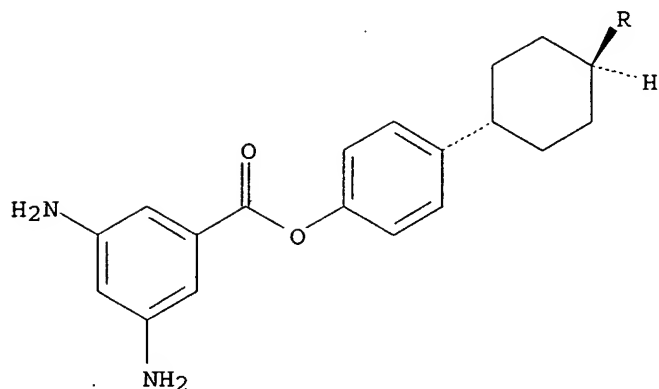
CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-methyl[1,1'-bicyclohexyl]-4-yl]phenyl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 664985-50-6

CMF C26 H34 N2 O2

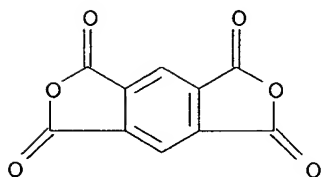
Relative stereochemistry.



CM 2

CRN 89-32-7

CMF C10 H2 O6



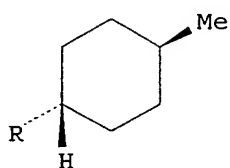
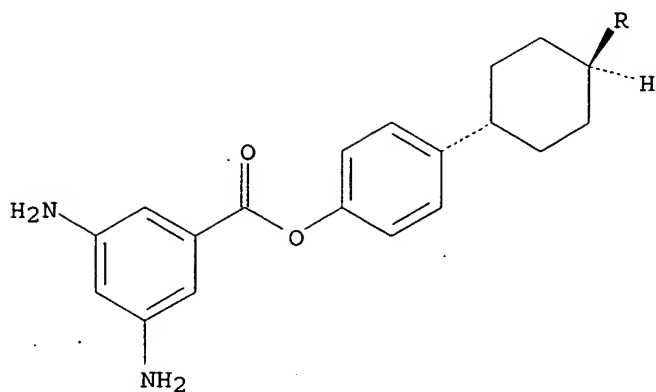
IT 664985-50-6P 664985-51-7P 664985-52-8P  
664985-53-9P

(manufacture of phenylenediamines bearing long side chains for  
polyamic acid, polyamides, polyimides, polyamide-polyimides as  
alignment films for liquid crystal displays)

RN 664985-50-6 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-methyl[1,1'-  
bicyclohexyl]-4-yl]phenyl ester (9CI) (CA INDEX NAME)

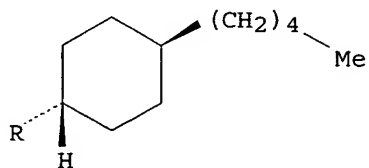
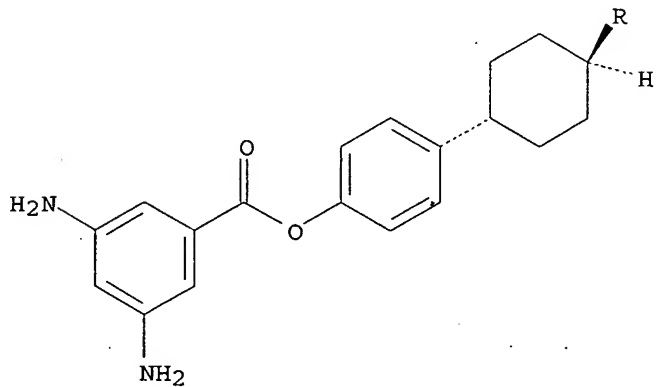
Relative stereochemistry.



RN 664985-51-7 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl]phenyl ester (9CI) (CA INDEX NAME)

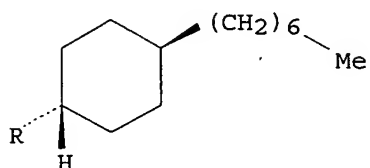
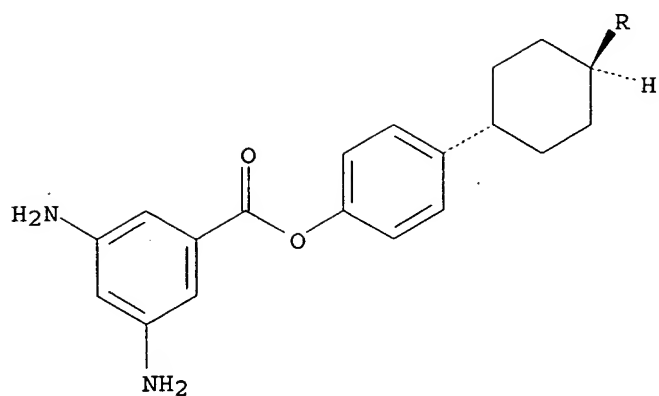
Relative stereochemistry.



RN 664985-52-8 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4-[(trans,trans)-4'-heptyl[1,1'-bicyclohexyl]-4-yl]phenyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

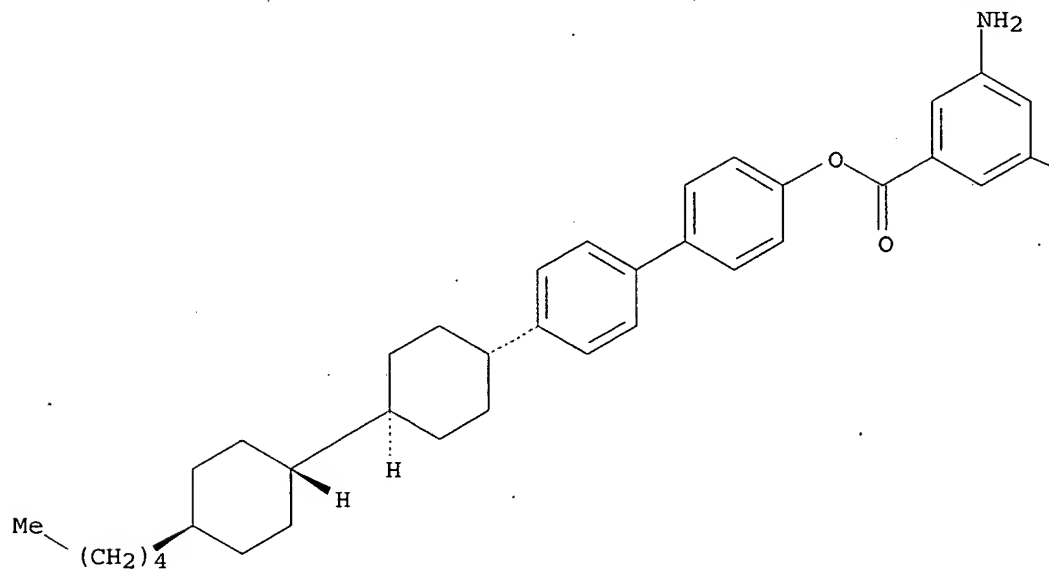


RN 664985-53-9 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-[(trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl][1,1'-biphenyl]-4-yl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B

NH<sub>2</sub>

IC ICM C07C229-60  
ICS C08G069-26; C08G073-10; C08G073-14; G02F001-13; G02F001-1337  
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)  
Section cross-reference(s): 25, 35, 38  
IT 74-88-4DP, Methyl iodide, reaction product with polyamide  
664985-55-1DP, reaction product with Me iodide  
664985-55-1P 664985-56-2P 664985-57-3P  
664985-58-4P 664985-59-5P 664985-60-8P  
664985-61-9P 664985-62-0P  
(manufacture of phenylenediamines bearing long side chains for  
polyamic acid, polyamides, polyimides, polyamide-polyimides as  
alignment films for liquid crystal displays)  
IT 664985-54-0P  
(manufacture of phenylenediamines bearing long side chains for  
polyamic acid, polyamides, polyimides, polyamide-polyimides as  
alignment films for liquid crystal displays)  
IT 182315-97-5P 664985-50-6P 664985-51-7P  
664985-52-8P 664985-53-9P 666722-84-5P  
(manufacture of phenylenediamines bearing long side chains for  
polyamic acid, polyamides, polyimides, polyamide-polyimides as  
alignment films for liquid crystal displays)

L38 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:76765 HCAPLUS  
DOCUMENT NUMBER: 140:154558  
TITLE: Liquid crystal-aligning agent for liquid  
crystal display device  
INVENTOR(S): Shimizu, Shigeo; Ota, Yoshihisa  
PATENT ASSIGNEE(S): JSR Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2004027201	A2	20040129	JP 2003-113959	2003 0418
NL 1023305	A1	20031031	NL 2003-1023305	2003 0429
NL 1023305	C2	20050623		
US 2004031950	A1	20040219	US 2003-424728	

USHA SHRESTHA EIC 1600 REM 1A64

PRIORITY APPLN. INFO.:

JP 2002-128209

A

2003  
04292002  
0430

JP 2003-113959

A

2003  
0418

AB The title agent contains polymers of polyamic acids and of imide derived from polyamic acids, wherein the polymer contains substituted or non-substituted biphenyl, naphthyl, phenanthrenyl, dibenzofuranyl, and anthracenyl groups, and has main chain of  $C \geq 8$ ,  $C \geq 3$  perfluoroalkyl,  $C \geq 6$ , 1-cycloalkylene, or  $\geq 3$  ring of polycyclic group, -R-X-A group (R =  $C \geq 3$  hydrocarbon; X = single bond, -O-, -CO-, etc.; A = halo, cyano, fluoroalkyl, etc.), or -R1-X1-R2-X2-R3 (R1-3 =  $C \geq 3$  hydrocarbon, -(SiO) $n$ -,;  $n \geq 5$ ; X1-2 = single bond, -O-, -CO-, etc.). The agent provides good liquid crystal alignment such as elimination of a ghost image of liquid crystal displays.

IT 652140-53-9P 652140-62-0P 652140-65-3P  
652141-31-6P 652141-34-9P 652141-35-0P  
(liquid crystal-aligning agent for liquid crystal display device)

RN 652140-53-9 HCAPLUS

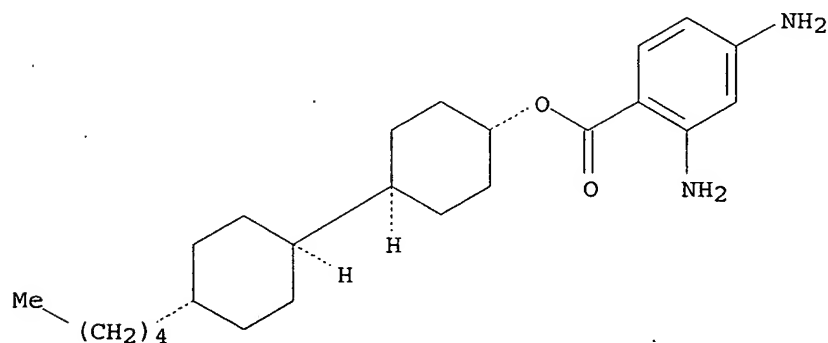
CN Benzoic acid, 2,4-diamino-, (trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl ester, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 652140-52-8

CMF C24 H38 N2 O2

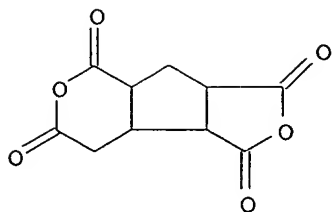
Relative stereochemistry.



CM 2

CRN 87078-75-9

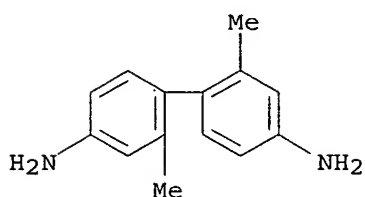
CMF C10 H8 O6



CM 3

CRN 84-67-3

CMF C14 H16 N2



RN 652140-62-0 HCAPLUS

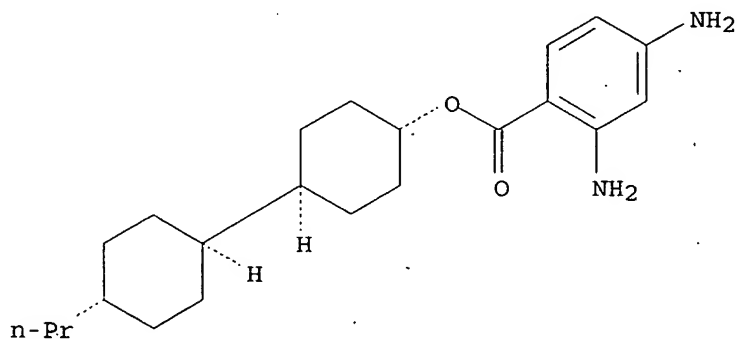
CN Benzoic acid, 2,4-diamino-, (trans,trans)-4'-propyl[1,1'-bicyclohexyl]-4-yl ester, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 652140-61-9

CMF C22 H34 N2 O2

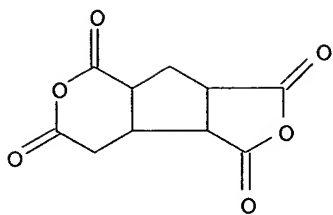
Relative stereochemistry.



CM 2

CRN 87078-75-9

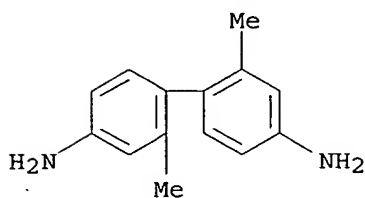
CMF C10 H8 O6



CM 3

CRN 84-67-3

CMF C14 H16 N2



RN 652140-65-3 HCAPLUS

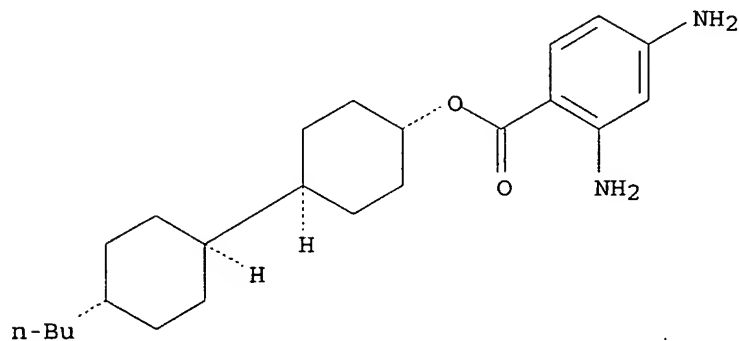
CN Benzoic acid, 2,4-diamino-, (trans,trans)-4'-butyl[1,1'-bicyclohexyl]-4-yl ester, polymer with 2,2'-dimethyl[1,1'-biphenyl]-4,4'-diamine and hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 652140-64-2

CMF C23 H36 N2 O2

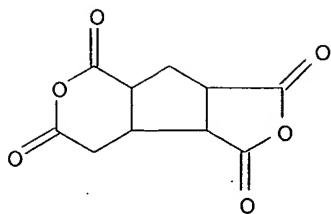
Relative stereochemistry.



CM 2

CRN 87078-75-9

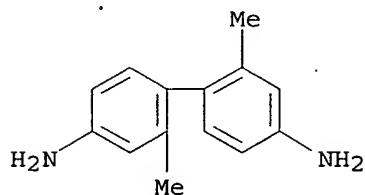
CMF C10 H8 O6



CM 3

CRN 84-67-3

CMF C14 H16 N2



RN 652141-31-6 HCAPLUS

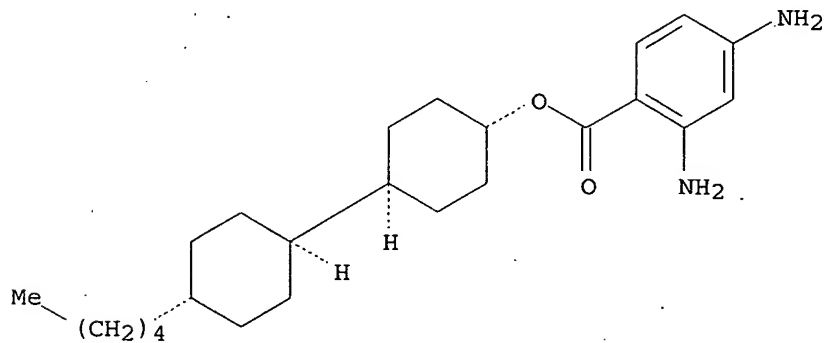
CN Benzoic acid, 2,4-diamino-, (trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl ester, polymer with hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 652140-52-8

CMF C24 H38 N2 O2

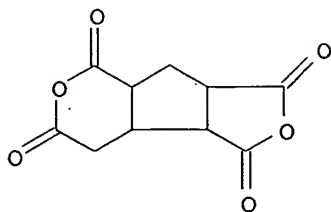
Relative stereochemistry.



CM 2

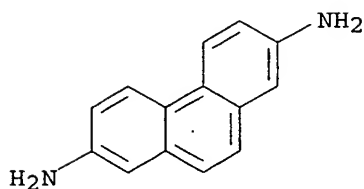
CRN 87078-75-9

CMF C10 H8 O6



CM 3

CRN 62245-46-9  
CMF C14 H12 N2

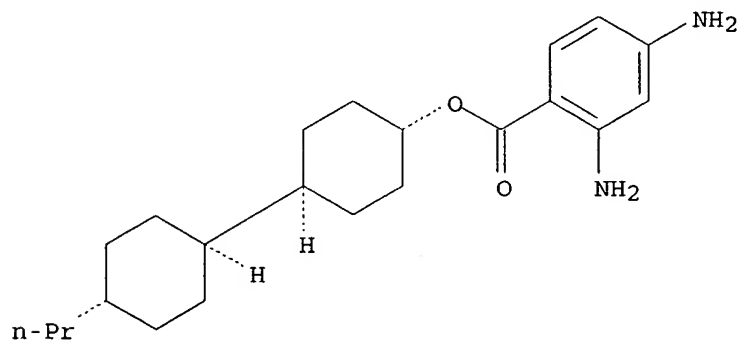


RN 652141-34-9 HCAPLUS  
CN Benzoic acid, 2,4-diamino-, (trans,trans)-4'-propyl[1,1'-bicyclohexyl]-4-yl ester, polymer with hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

CM 1

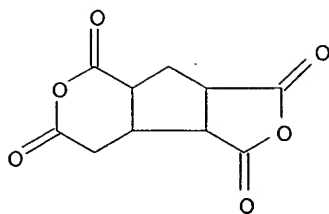
CRN 652140-61-9  
CMF C22 H34 N2 O2

Relative stereochemistry.



CM 2

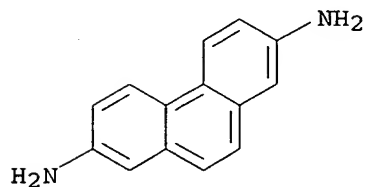
CRN 87078-75-9  
CMF C10 H8 O6



CM 3

CRN 62245-46-9

CMF C14 H12 N2



RN 652141-35-0 HCAPLUS

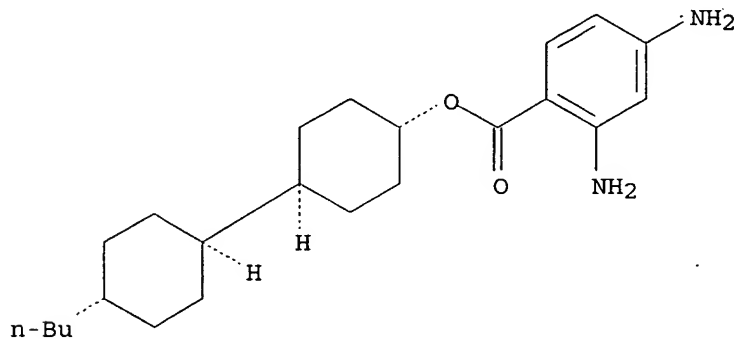
CN Benzoic acid, 2,4-diamino-, (trans,trans)-4'-butyl[1,1'-bicyclohexyl]-4-yl ester, polymer with hexahydro-1H,3H-furo[3',4':3,4]cyclopenta[1,2-c]pyran-1,3,5,7-tetrone and 2,7-phenanthrenediamine (9CI) (CA INDEX NAME)

CM 1

CRN 652140-64-2

CMF C23 H36 N2 O2

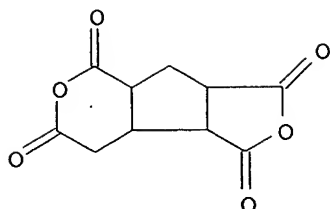
Relative stereochemistry.



CM 2

CRN 87078-75-9

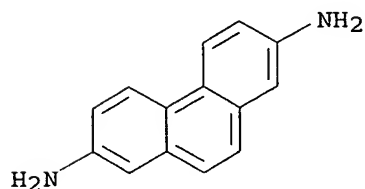
CMF C10 H8 O6



CM 3

CRN 62245-46-9

CMF C14 H12 N2



IC ICM C08G073-10

ICS G02F001-1337

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

IT	652139-03-2P	652139-04-3P	652139-05-4P	652139-07-6P
	652139-08-7P	652139-09-8P	652139-10-1P	652139-11-2P
	652139-12-3P	652139-13-4P	652139-14-5P	652139-15-6P
	652139-16-7P	652139-17-8P	652139-18-9P	652139-20-3P
	652139-21-4P	652139-22-5P	652139-23-6P	652139-24-7P
	652139-25-8P	652139-26-9P	652139-27-0P	652139-29-2P
	652139-30-5P	652139-31-6P	652139-32-7P	652139-33-8P
	652139-34-9P	652139-35-0P	652139-36-1P	652139-37-2P
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	652139-50-9P	652139-52-1P	652139-53-2P	652139-54-3P
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	652139-78-1P	652139-80-5P	652139-81-6P	652139-82-7P
	652139-83-8P	652139-84-9P	652139-85-0P	652139-86-1P
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	652140-66-4P	652140-68-6P	652140-70-0P	652140-71-1P
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652140-77-7P 652140-79-9P 652140-80-2P 652140-81-3P  
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 652141-68-9P 652141-69-0P 652141-70-3P 652141-71-4P  
 652141-72-5P 652141-73-6P 652141-74-7P 652145-54-5P  
 652145-56-7P

(liquid crystal-aligning agent for liquid crystal display device)

L38 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:257864 HCAPLUS

DOCUMENT NUMBER: 138:295000

TITLE: Phenylenediamine derivative, liquid crystal alignment layer from it, and display element containing it

INVENTOR(S): Tamura, Norihisa

PATENT ASSIGNEE(S): Chisso Corp., Japan; Chisso Petrochemical Corporation

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003096034	A2	20030403	JP 2001-296750	2001 0927

PRIORITY APPLN. INFO.: JP 2001-296750

2001  
0927

OTHER SOURCE(S): MARPAT 138:295000

AB The alignment layer is manufactured with a varnish containing polyamic acid, polyimide, polyamide, and/or polyamide-polyimide manufactured using (H<sub>2</sub>N)2C<sub>6</sub>H<sub>3</sub>ZYB1A1B2A2B3A3R [Z = CH<sub>2</sub>, CHF, CF<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, CF<sub>2</sub>O; Y = 1,4-cyclohexylene, (F- or Me-substituted) 1,4-phenylene; A1-A3 = single bond, any group given for Y; B1-B3 = single bond, C1-4 alkylene, O, C1-3 oxyalkylene, C1-3 alkyleneoxy; R = H, C1-10 (fluoro)alkyl, C1-9 (fluoro)alkoxy, alkoxyalkyl]. The layer shows

pretilt angle of a few degrees to 90° and resistance to rubbing or washing.

IT 504431-06-5P, 1,2-Bis(4,4'-diaminophenyl)ethane-4-[4-(4-n-pentylcyclohexyl)cyclohexyl-2,6-difluorophenyl]oxydifluoromethyl-1,3-phenylenediamine-pyromellitic anhydride copolymer  
(alignment layer; phenylenediamine derivative as monomer for alignment layer for liquid crystal displays)

RN 504431-06-5 HCAPLUS

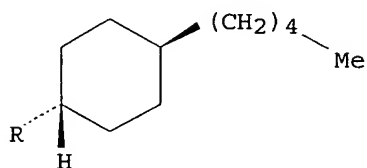
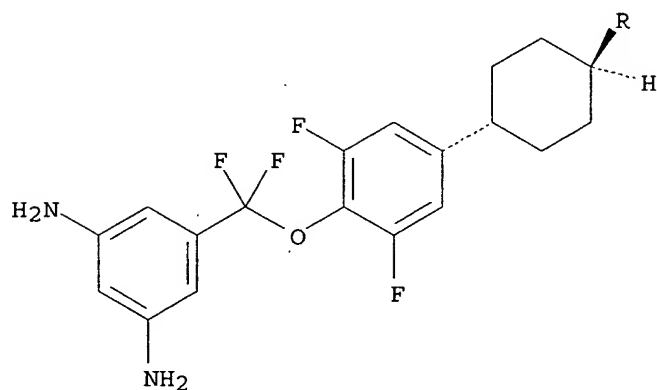
CN 1H,3H-Benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 5-[[2,6-difluoro-4-[(trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl]phenoxy]difluoromethyl]-1,3-benzenediamine and 4,4'-(1,2-ethanediyl)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 504430-86-8

CMF C30 H40 F4 N2 O

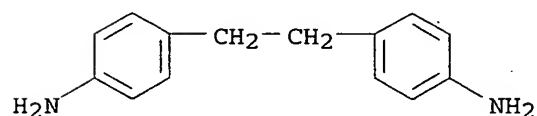
Relative stereochemistry.



CM 2

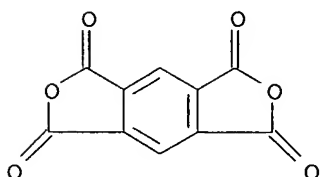
CRN 621-95-4

CMF C14 H16 N2



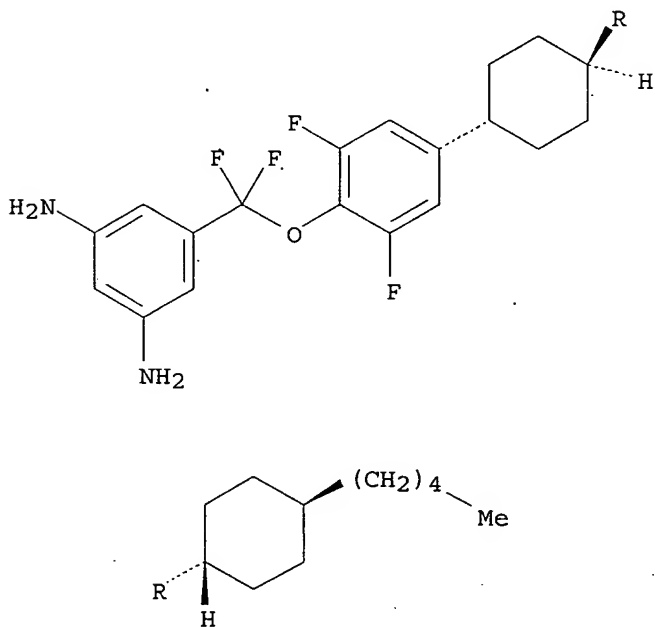
CM 3

CRN 89-32-7  
CMF C10 H2 O6



IT 504430-86-8P  
(phenylenediamine derivative as monomer for alignment layer for liquid crystal displays)  
RN 504430-86-8 HCAPLUS  
CN 1,3-Benzenediamine, 5-[[2,6-difluoro-4-[(trans,trans)-4'-pentyl[1,1'-bicyclohexyl]-4-yl]phenoxy]difluoromethyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM C07C211-50  
ICS C07C217-80; C08G069-00; C08G073-10; G02F001-1337  
CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 25, 38  
IT 504430-98-2P, 1,2-Bis(4,4'-diaminophenyl)ethane-3,5-diamino-4'-[4-(4-n-pentylcyclohexyl)cyclohexyl]diphenyldifluoromethane-pyromellitic anhydride copolymer 504430-99-3DP, methylated 504431-00-9P 504431-01-0P 504431-02-1P 504431-03-2P 504431-05-4P 504431-06-5P, 1,2-Bis(4,4'-diaminophenyl)ethane-4-[4-(4-n-pentylcyclohexyl)cyclohexyl-2,6-difluorophenyl]oxydifluoromethyl-1,3-phenylenediamine-pyromellitic anhydride copolymer  
(alignment layer; phenylenediamine derivative as monomer for

alignment layer for liquid crystal displays)

IT 504430-82-4P 504430-83-5P 504430-84-6P 504430-85-7P  
 504430-86-8P 504430-88-0P 504430-89-1P 504430-91-5P  
 504430-92-6P 504430-93-7P 504430-94-8P 504430-95-9P  
 504430-96-0P 504430-97-1P

(phenylenediamine derivative as monomer for alignment layer for liquid crystal displays).

L38 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:568208 HCAPLUS

DOCUMENT NUMBER: 127:221121

TITLE: Diaminobenzene derivatives, polyimides prepared therefrom, and alignment films for liquid crystal

INVENTOR(S): Nihira, Takayasu; Nawata, Hideyuki; Fukuro, Hiroyoshi

PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9730107	A1	19970821	WO 1997-JP358	1997 0212
W: CN, KR, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CN 1211263	A	19990317	CN 1997-192253	1997 0212
CN 1125809	B	20031029		
EP 905167	A1	19990331	EP 1997-902655	1997 0212
EP 905167	B1	20060201		
R: DE, FR, GB, IT, NL				
TW 494133	B	20020711	TW 1997-86101606	1997 0213
TW 236497	B1	20050721	TW 2001-90118523	1997 0213
JP 09278724	A2	19971028	JP 1997-30108	1997 0214
US 6111059	A	20000829	US 1998-125043	1998 0812
HK 1018905	A1	20040305	HK 1999-104029	1999 0917
CN 1388149	A	20030101	CN 2002-105157	2002 0221

PRIORITY APPLN. INFO.:

JP 1996-28020

A

1996  
0215

WO 1997-JP358

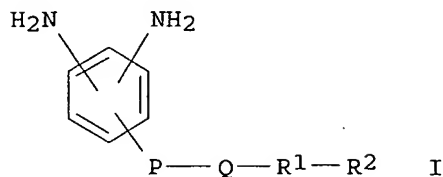
W

1997  
0212

OTHER SOURCE(S):

MARPAT 127:221121

GI



AB Diaminobenzene derivs. of general structure I (P = single bond, O, CO<sub>2</sub>, CONH; Q = aromatic ring, aliphatic ring, hetero ring; R<sub>1</sub> = alicyclic group; R<sub>2</sub> = C1-22 alkyl) are synthesized and polymerized with tetracarboxylic acid derivs., in particular 1,2,3,4-cyclobutanetetracarboxylic acid, to provide to form polyimide precursors having a reduced viscosity of 0.05-5.0 dL/g (as determined at 30° in N-methylpyrrolidone at a concentration of 0.5 g/dL). The precursors are subjected to ring-closing reaction to provide alignment films for liquid crystals.

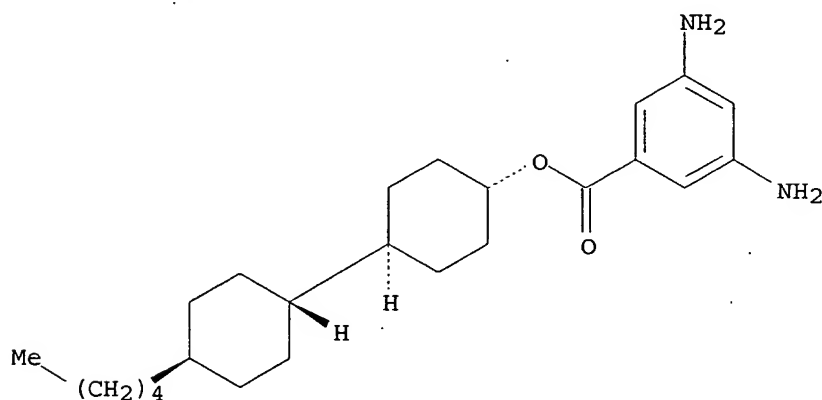
IT 194939-27-0P 194939-35-0P 194939-37-2P

(diaminobenzene derivs. for preparation of polyimides for liquid crystal alignment films)

RN 194939-27-0 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-pentyl[1,1'-bicyclohexyl]-4-yl ester, [trans(trans)]- (9CI) (CA INDEX NAME)

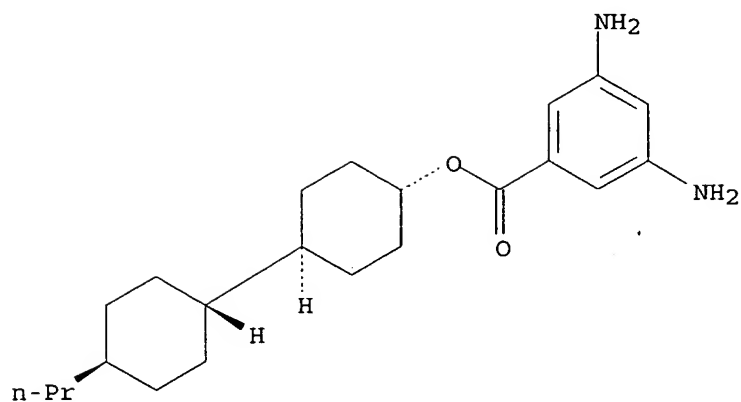
Relative stereochemistry.



RN 194939-35-0 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-propyl[1,1'-bicyclohexyl]-4-yl ester, [trans(trans)]- (9CI) (CA INDEX NAME)

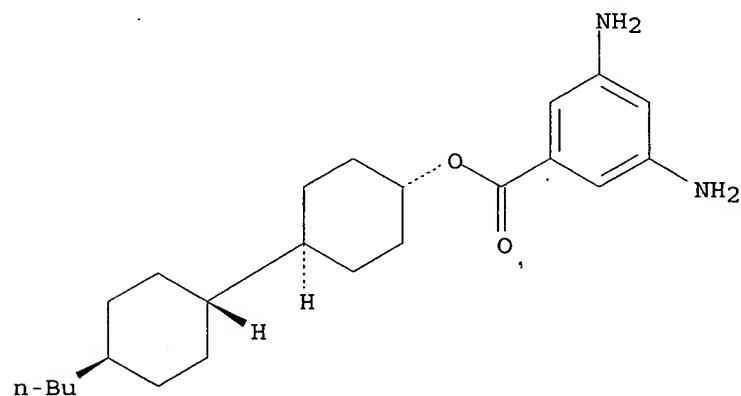
Relative stereochemistry.



RN 194939-37-2 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-butyl[1,1'-bicyclohexyl]-4-yl ester, [trans(trans)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 194939-41-8P 194939-44-1P 194939-45-2P  
194939-48-5P

(polyimides prepared from diaminobenzene derivs. for liquid crystal alignment films)

RN 194939-41-8 HCAPLUS

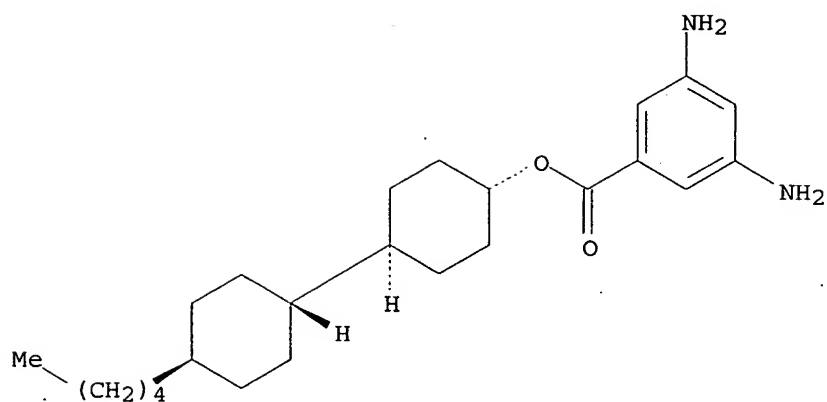
CN Benzoic acid, 3,5-diamino-, 4'-pentyl[1,1'-bicyclohexyl]-4-yl ester, [trans(trans)]-, polymer with tetrahydro[3,3'-bifuran]-2,2',5,5'-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 194939-27-0

CMF C24 H38 N2 O2

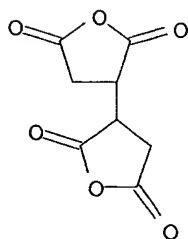
Relative stereochemistry.



CM 2

CRN 4534-73-0

CMF C8 H6 O6



RN 194939-44-1 HCAPLUS

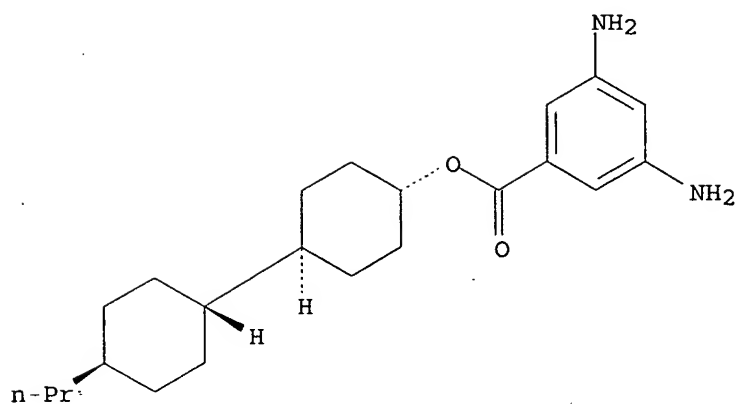
CN Benzoic acid, 3,5-diamino-, 4'-propyl[1,1'-bicyclohexyl]-4-yl ester, [trans(trans)]-, polymer with tetrahydro[3,3'-bifuran]-2,2',5,5'-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 194939-35-0

CMF C22 H34 N2 O2

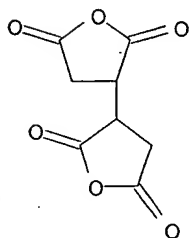
Relative stereochemistry.



CM 2

CRN 4534-73-0

CMF C8 H6 O6



RN 194939-45-2 HCAPLUS

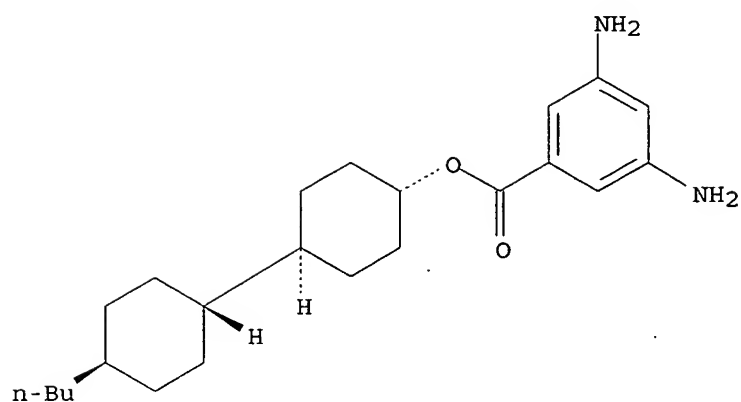
CN Benzoic acid, 3,5-diamino-, 4'-butyl[1,1'-bicyclohexyl]-4-yl  
 ester, [trans(trans)]-, polymer with tetrahydro[3,3'-bifuran]-  
 2,2',5,5'-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 194939-37-2

CMF C23 H36 N2 O2

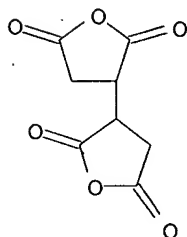
Relative stereochemistry.



CM 2

CRN 4534-73-0

CMF C8 H6 O6



RN 194939-48-5 HCAPLUS

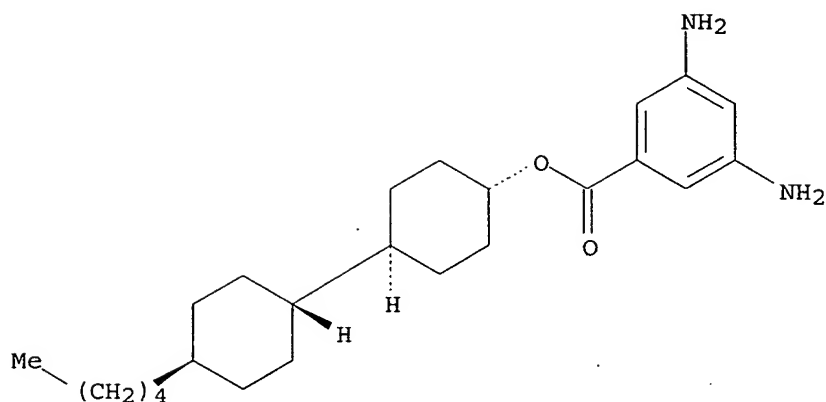
CN Benzoic acid, 3,5-diamino-, 4'-pentyl[1,1'-bicyclohexyl]-4-yl ester, [trans(trans)]-, polymer with 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] and tetrahydro[3,3'-bifuran]-2,2',5,5'-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 194939-27-0

CMF C24 H38 N2 O2

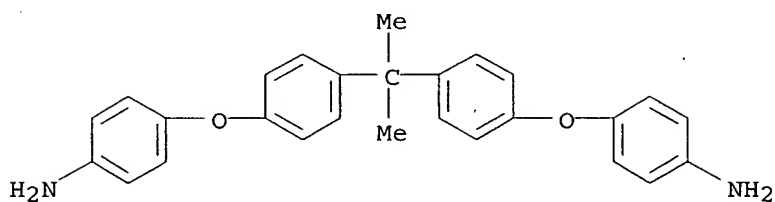
Relative stereochemistry.



CM 2

CRN 13080-86-9

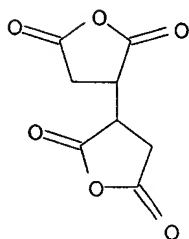
CMF C27 H26 N2 O2



CM 3

CRN 4534-73-0

CMF C8 H6 O6



IC ICM C08G073-10

ICS C07C217-76; C07C217-84; C07C219-32; C07C219-34; C07C237-32;  
C07C237-34; C07C237-36; C09K019-56; G02F001-1337

CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 25, 75

IT 194939-21-4P 194939-24-7P 194939-27-0P 194939-30-5P

194939-33-8P 194939-35-0P 194939-37-2P

(diaminobenzene derivs. for preparation of polyimides for liquid  
crystal alignment films)

IT 194939-39-4P 194939-40-7P 194939-41-8P 194939-42-9P  
 194939-43-0P 194939-44-1P 194939-45-2P  
 194939-46-3P 194939-47-4P 194939-48-5P  
 (polyimides prepared from diaminobenzene derivs. for liquid crystal alignment films)

L38 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:245397 HCAPLUS  
 DOCUMENT NUMBER: 116:245397  
 TITLE: Liquid-crystal aligning-film composition  
 INVENTOR(S): Kanbe, Sadao; Aoki, Nobuo; Ebisawa, Makoto  
 PATENT ASSIGNEE(S): Seiko Epson Corp., Japan; Japan Carlit Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03179323	A2	19910805	JP 1989-329057	1989 1219
PRIORITY APPLN. INFO.:			JP 1988-320235	A1 1988 1219
			JP 1989-3243	A1 1989 0110
			JP 1989-25079	A1 1989 0203
			JP 1989-25080	A1 1989 0203
			JP 1989-150085	A1 1989 0613
			JP 1989-206550	A1 1989 0809
			JP 1989-208883	A1 1989 0811
			JP 1989-247564	A1 1989 0922

AB The title component contains a polyamic acid [NHCOR1(CO2H)2 CONHR2]n (R1 = aromatic or aliphatic ring; R2 = aromatic ring with side

chain having alkyl, alkoxy, or halo, and/or cyclic substituent; n = integer). The film gives a high pretilt angle and is suited for use in supertwisted nematic liquid-crystal displays.

IT 141288-28-0

(polyamic-acid aligning-film composition from, for liquid crystal display devices)

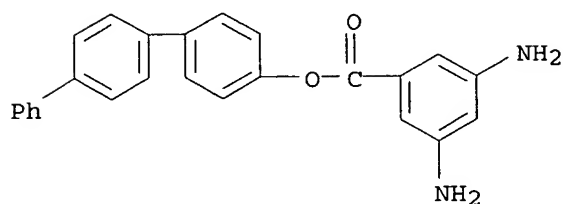
RN 141288-28-0 HCAPLUS

CN Benzoic acid, 3,5-diamino-, [1,1':4',1''-terphenyl]-4-yl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 141288-27-9

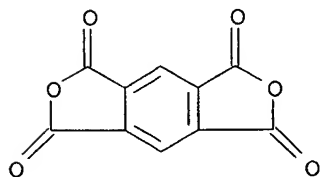
CMF C25 H20 N2 O2



CM 2

CRN 89-32-7

CMF C10 H2 O6



IC ICM G02F001-1337

ICS C08L079-08; C09K019-56

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 9043-05-4 25038-81-7 31475-63-5 84502-42-1 84516-43-8  
 94034-73-8 94148-69-3 94148-77-3 134500-11-1 134873-58-8  
 134873-59-9 134873-62-4 135150-71-9 135150-85-5  
 135150-88-8 136919-64-7 136919-66-9 136919-73-8  
 136951-19-4 136951-29-6 136951-34-3 136951-51-4  
 136951-53-6 136951-64-9 136951-66-1 136951-68-3  
 136984-41-3 139890-22-5 141256-62-4 141288-24-6  
 141288-26-8 141288-28-0 141288-30-4 141288-32-6  
 141288-34-8 141288-36-0 141288-41-7 141288-42-8  
 141288-43-9 141288-45-1 141288-46-2 141288-48-4  
 141288-50-8 141288-51-9 141288-53-1 141288-55-3  
 141288-57-5 141288-58-6 141288-59-7 141288-61-1  
 141288-63-3 141288-64-4 141288-65-5 141288-67-7  
 141288-69-9 141288-71-3 141288-72-4 141288-73-5

141288-75-7	141288-76-8	141288-78-0	141288-80-4
141288-82-6	141288-83-7	141288-85-9	141288-86-0
141288-88-2	141288-90-6	141288-92-8	141288-94-0
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141441-45-4	141441-46-5	141441-47-6	141441-49-8
141441-50-1	141441-51-2	141441-52-3	141441-53-4
141441-54-5	141441-55-6	141441-56-7	141441-57-8
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141441-62-5	141441-63-6	141441-64-7	141441-66-9
141441-68-1	142302-43-0		

(polyamic-acid aligning-film composition from, for liquid crystal display devices)

L38 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:633188 HCAPLUS  
 DOCUMENT NUMBER: 115:233188  
 TITLE: Preparation of heat-resistant polyimides  
 INVENTOR(S): Aoki, Nobuo; Ebisawa, Makoto  
 PATENT ASSIGNEE(S): Japan Carlit Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 03121132	A2	19910523	JP 1990-33713	1990 0216
PRIORITY APPLN. INFO.:			JP 1989-52914	A1 1989 0307
			JP 1989-126579	A1 1989 0522
			JP 1989-173066	A1 1989 0706

AB Polyimides having good film-forming properties and useful for liquid crystal orientation films are prepared by polycondensation of tetracarboxylic acids with aromatic diamines bearing cyclic substituent pendant groups. Thus, reacting 5.4 parts cyclohexyloxy-1,4-phenylenediamine with 4.4 parts 3,3',4,4'-biphenyltetracarboxylic acid dianhydride in 118 parts AcNMe<sub>2</sub> at 20-30° for 24 h, coating the resulting solution on glass and heating at 250° for 1 h gave a film having

decomposition temperature 353°.

IT 136951-23-0P

(preparation of, heat-resistant, for liquid crystal orientation films)

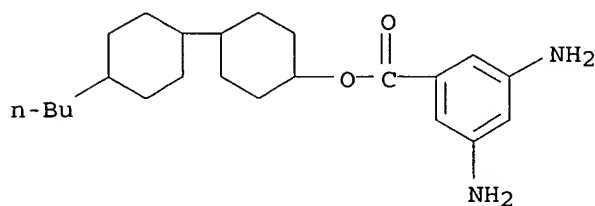
RN 136951-23-0 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 4'-butyl[1,1'-bicyclohexyl]-4-yl ester, polymer with 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetrone (9CI) (CA INDEX NAME)

CM 1

CRN 136951-22-9

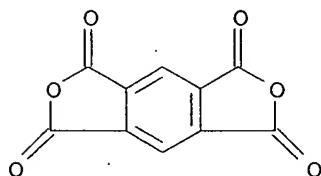
CMF C23 H36 N2 O2



CM 2

CRN 89-32-7

CMF C10 H2 O6



IC ICM C08G073-10

CC 35-5 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 75

IT	31587-10-7P	84515-77-5P	84516-43-8P	94148-69-3P
	94148-77-3P	94217-85-3P	94217-86-4P	136919-37-4P
	136919-40-9P	136919-41-0P	136919-42-1P	136919-43-2P
	136919-44-3P	136919-45-4P	136919-46-5P	136919-47-6P
	136919-48-7P	136919-49-8P	136919-50-1P	136919-51-2P
	136919-52-3P	136919-53-4P	136919-54-5P	136919-55-6P
	136919-62-5P	136919-64-7P	136919-66-9P	136919-68-1P
	136919-70-5P	136919-72-7P	136919-73-8P	136951-17-2P
	136951-19-4P	136951-21-8P	<b>136951-23-0P</b>	136951-25-2P
	136951-27-4P	136951-29-6P	136951-31-0P	136951-32-1P
	136951-34-3P	136951-36-5P	136951-38-7P	136951-40-1P
	136951-42-3P	136951-44-5P	136951-46-7P	136951-48-9P
	136951-49-0P	136951-51-4P	136951-53-6P	136951-55-8P
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	136958-35-5P	136958-36-6P	136958-40-2P	136958-42-4P
	136958-43-5P	136958-44-6P	136958-45-7P	136958-46-8P
	136958-48-0P	136958-49-1P	136958-53-7P	136958-54-8P

136984-41-3P 137260-61-8P  
(preparation of, heat-resistant, for liquid crystal orientation films)